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Presidential Address.

SECTION OF OBSTETRICS AND GYNÆCOLOGY, AUSTRALASIAN MEDICAL CONGRESS, BRISBANE, 1920.

By **Fourness Barrington, M.S. (Edin.), F.R.C.S. (Eng.),** *Sydney.*

Before inflicting upon you the customary address from the chair, permit me to take this opportunity of thanking the Executive Committee for the honour done in electing me to this position.

Since our last meeting in Auckland nearly seven years ago, a great upheaval has upset the world and brought grief to millions of homes and its far-reaching, baneful effects still last.

The fruits of five years' war experience are now being reaped by medicine and surgery. During this period obstetrics and gynæcology have not received the same stimulus to progress. But gynæcology, unlike obstetrics, is of recent birth; its development has been rapid and its achievement most brilliant. In the obstetrical art during well nigh fifty years, marked results have been attained through our knowledge of infection. From the heavy death-rate following child-birth from sepsis, the technique carried out in hospital practice has almost eliminated the mortality. Indeed, it may be said that sepsis, in cases dealt with entirely in properly conducted obstetric hospitals, has almost disappeared. And with this almost vanished mortality it may be safely inferred there is a correspondingly low morbidity. These results contribute by no means the smallest tribute to Lister's genius.

Unfortunately, however, the number of labours conducted in hospitals and nursing-homes is a very small fraction of the total births. Unfortunately, because the results of private practice remain far behind those obtained under institutional care. There is a terrible mortality in Australasia connected with what ought to be a physiological process; this mortality does not diminish in spite of the advantages of improved sanitation, accurate scientific knowledge and improved instrumental appliances. There is an annual death-rate varying from 4.3 to 6.3 per thousand confinements or an average annual mortality of 5.1 per thousand registered births based on the statistics of Australasia for the years 1909 to 1919 inclusive. What are we to say for modern obstetrics when one woman loses her life out of every 200 in the act of child-bearing, when the majority of deaths occur in those in the very prime of life, when many of them are already the mothers of helpless children? Not only do many die, but many more are more or less permanently disabled as the result of child-birth.

Indeed, at the present day, obstetric art lies under a stigma and its position is far from satisfactory. Its enormous morbidity accounts for a large amount of gynæcology. As the greater part of the gynæcology of to-day, from this and other causes, is preventible, it occurred to me to take as my theme, preventive gynæcology, because the influence of the members at a meeting such as this, could do much to help a much-needed reformation. While fully aware of the impropriety of introducing controversial matter when there is no right of discussion and reply, I will crave your indulgence when anything debateable is put forth and would say with Voltaire: "I give you my opinion, not as being good, but as being my own."

Obstetric Morbidity.

There is nothing more certain than the importance of labour and abortion as the chief ætiological factor in the majority of the diseases peculiar to women. The obstetric morbidity shows itself in the immediate and remote infections and the traumatisms which pass to the gynæcologist for treatment. The enumeration of the pathological effects of parturition, be it after full-time or interrupted gestation, is a formidable one. Amongst the lesions which can be so traced, are the more serious infections leading to salpingo-ovaritis and pelvic peritonitis and their far-reaching effects; pelvic cellulitis; the minor infections of the cervix and body with subinvolution of the uterus leading to chronic cervical catarrh, chronic endometritis and chronic metritis; traumata, producing laceration of the cervix, vagina and perineum, injuries of the pelvic floor and stretching of the pelvic connective tissue leading to retroversion and prolapse and the rarer conditions of various fistulæ in the genital tract and inversion of the uterus.

Although some of these lesions must be admitted to be unavoidable, many of them can be prevented by strict attention to all the details of the antiseptic and aseptic ritual in surgical practice and a due recognition of the principles which should guide us as to the proper time to perform obstetric operations. Much of this obstetric morbidity is largely referable to the false security given by our modes of advance improperly carried out. Much of it can be traced to the failure to appreciate the proper use of two of the greatest blessings of humanity—anæsthesia and our various methods of preventing infection.

Before the use of anæsthesia, interference was strictly limited and obstetric operations were at a minimum, because such interference increased the conscious sufferings of the patient. Thus forceps were employed only when the natural efforts had failed and other operations, such as the artificial dilatation of a rigid cervix, were not attempted until they became an urgent necessity. When anæsthesia became possible, interference became more frequent, because it involved no additional suffering; operations were undertaken in the absence of any real necessity and without a due appreciation of the inevitable risks thereby incurred, for the convenience of the practitioner or on the clamorous demands of the patient. And so complications arose and the dangers of labour greatly increased.

Then came the antiseptic era. Here was the key-

stone of obstetric practice and the panacea for all the dangers of childbed. The forceps were now applied for the commonest indication—weak pains. There was no need to wait for full dilatation of the cervix or relaxation of the pelvic floor structures. If they tore slightly, no matter; the antiseptic made that quite safe. And so a forcible delivery results in slight infection, which produces only sufficient morbidity in the lying-in period to raise the temperature to 100° F. for a few days. In a few months the patient is physically a wreck of her former self, with constant backache, leucorrhœa and menorrhagia and it is found that the cervix is deeply torn bilaterally, the vaginal orifice unduly relaxed and the uterus retroverted and prolapsed. It is obvious to anyone who has had charge of a large gynæcological outpatient department, that far more cases of the minor diseases of women are the direct result of obstetric operations performed too soon than too late. Thus is disregarded one of the governing principles preventing infection, *viz.*, to limit, as far as possible, the puerperal wounds.

Then followed the best method of prophylaxis in the whole range of obstetrics, abdominal palpation. By its means not only could a more thorough diagnosis be made, but it eliminated the danger of carrying infection by digital examination. It is to be marvelled at that it is not universally used. Every vaginal examination during labour increases the risks of sepsis, because it means an entrance upon the antiseptic and aseptic fields of operation by way of the septic vulva. The majority of cases of normal labour, when the head is fixed at the onset, can be completely conducted by abdominal palpation alone, if the pelvic grips be used to determine the degree of flexion and descent of the head. The septic vulva alone needs cleansing; beyond that there is no need to touch the parturient.

Finally came the use of sterilized rubber gloves after the most rigid hand preparation. Their undoubted usefulness is nullified by another weak spot in the precautionary measures taken against infection, *viz.*, the toilet of the vulva. The habit of performing all manner of manipulations in the vagina with only a very cursory cleansing of the vulva, an area which is the most septic in the whole body, is responsible for much mischief.

A large proportion of the septic complications following parturition is due to organisms from this area being pushed into the upper part of the birth canal by gloved hands and instruments. The scrupulous preparation of the vulva and adjacent parts during and after delivery has been an important factor in in reducing the morbidity in lying-in hospitals.

To these methods of preventive infection should be added proper conduct of the third stage of labour. There is probably no one factor so potent for evil, so productive of subsequent infection, as attempts at early and forcible expression of the placenta. My advice to my students has always been: "Never hurry a normal third stage; wait, watch and pray lest you enter into temptation." The reward is great: a well retracted, empty uterus, a great safeguard against sepsis.

While immediate suture of all perineal tears after child-birth is universally regarded as imperative, more stress should be laid on the importance of proper *post partum* care as preventive of much gynæcology. In all cases a bimanual examination of the uterus should be made ten days after child-birth; backward displacement can be readily corrected at this time by postural and digital manipulation and retention in position by a Hodge-Smith pessary. If the uterus is thus early held in its normal position until the ligamentous supports have involuted and regained their tone, there will be no permanent displacement, provided there has been efficient primary suture of the damaged pelvic floor. All lacerations should be inspected at this time. Unless infected they should be completely healed, but no patient should be allowed to get up with an unhealed perineal laceration. So, too, every woman whose pelvic floor has been badly torn, should be examined after the lapse of two months to ascertain the final results of *post partum* repair. By these simple means permanent retroflexion and prolapse of the uterus can be largely averted.

Child-bearing is the greatest industry of human existence, yet how many from pathological sequelæ have one child and no more! One-child sterility is far from uncommon.

From the unduly large mortality and morbidity it would seem as if the process of reproduction had passed from the physiological to the pathological and the question arises as to how this is to be remedied in the future. One word gives the answer—education; better education alike of medical students, obstetric nurses and the lay public. This is the time and opportunity for the inauguration of a new movement for better obstetrics.

The main object of our medical schools should be to equip students thoroughly for general practice. Obstetrics should be especially well taught, because the general practitioner can get his major surgery and gynæcology done by an expert, but much of the obstetrics he must do himself. Obstetric work is of such national importance as to entitle it to rank with medicine and surgery on equal terms and it can only do so by being afforded similar facilities for instruction. Yet the training in obstetrics is crowded into the background and remains the weakest spot in the whole curriculum. The poor obstetrics of to-day is largely the outcome of insufficient time given for its efficient teaching. There is an urgent demand for more practical training and better clinical instruction; until this is done there will be no decided improvement.

The truth is not always pleasant, but it may be said here that when the practising obstetrician realizes his great responsibility and that no small share of this terrible maternal mortality and morbidity lies at his door, he has made the first step towards true progress. When he further realizes that labour is a natural process, which is best left to itself and which in the great majority of cases it is criminal to disturb; when he realizes that every interference increases the inherent danger a hundredfold; when under this consciousness he brings with him to every lying-in chamber all that is possible of those principles of antiseptic and aseptic surgery which have

led to the triumphs of modern gynæcology, we shall not have long to wait for the lightening of the dark cloud—the enormous mortality and morbidity—which hangs over us now.

The problem of good obstetrics will probably be ultimately solved through education of the lay public. As soon as the people understand that labour is essentially a surgical process, which needs the same environment and careful technique as a major surgical operation and which may be seriously complicated at any time, they will more fully appreciate the importance of good obstetrics. It will be for the medical profession, however, to pave the way for the more efficient training of obstetric practitioners and nurses and to educate the public through the improved results of practice. Further, the people must be brought to the point when they will demand good services and provide ways and means for adequate compensation. At the present time obstetrics is the poorest paid branch of medicine, though, if properly done, it is the most exacting and tiring.

The educational brochures prepared by the New Zealand Society for the health of women and children and issued gratis by the Public Health Department is an example which might well be followed. This good work is largely carried out by voluntary contributions aided by Dominion subsidies. The gospel of good obstetrics needs to be preached far and wide and will accomplish much in the solution of the problem.

It is my firm conviction, however, that any scheme for raising the standard of obstetrics which does not contemplate the ultimate elimination of the midwife, will not succeed. Old traditions die hard, for in New South Wales and South Australia the untrained, unregistered midwife is still allowed to practise.

The lay public will continue to regard with indifference all pleas for improvement in obstetric teaching and practice so long as a large number of confinements are in the hands of untrained and unregistered women. The movement to train and license midwives is doomed to ultimate failure. It is founded upon a great social injustice as it admits a double standard of obstetrics and is opposed to the urgent demand for a competent obstetric service for those unable to pay. The time has arrived when obstetrics should be regarded as a major science and art which requires high skill to do even moderate work. The attempt to train midwives to practise obstetrics in the light of modern ideals is an impossible task.

The gradual elimination of midwives and their replacement by the extension of obstetric charities, free hospitals and out-patient services for the poor by a greater development of obstetric nurses, very much on the lines of the Jubilee nurses in England or the Plunkett nurses in New Zealand, would be a progressive step. The best women should be chosen for such nurses and they should be well trained in modern obstetric methods. Given a sufficiency of women of this stamp under suitable medical supervision and with a due sense of their responsibility, puerperal mortality and morbidity would soon sink.

Ways and means are readily found for these much needed reforms when we study the financial aspect of the Federal maternity bonus. The total expenditure in claims in the first five and three-quarter years since its inception was £4,357,895. It is safe to say the tax-payers of Australia are not getting any material return for this annual expenditure of three quarters of a million sterling. This legislative provision has had a fair trial and has been a lamentable failure. There has been no reduction in the obstetric mortality or infantile death-rate, nor has the birth-rate increased. Much of the money has been utilized for purposes for which it was never intended and thousands of pounds a year are given to people who are in such a financial position they do not need the bonus.

If the money spent annually, about £750,000, on the maternity bonus by the Federal Government were utilized for further up-to-date obstetric hospitals, including prematernity accommodation and prenatal clinics, with efficiently salaried medical officers and the extension of obstetric charities carried out by well-trained obstetric nurses, under medical supervision, many valuable lives would be saved and much ill-health in women referable to the infections and traumata of child-birth would be abolished.

It is in the development of maternity hospitals and the diffusion of knowledge concerning their function that we must look for the most immediate improvement. The public should be taught that it is just as necessary to go to a hospital for child-birth as for a surgical operation. There can be no more important factor in modern obstetrics than the multiplication of such hospitals. Indeed, the more universal hospitalization of labour cases is much needed. This would be greatly aided by the development of social service work. Under the supervision of social service workers suitable "home-helps" would efficiently care for the family and look after the home during the mother's absence under proper institutional care.

These reforms would take time and would need the aid of State subsidies and the benevolence of generous donors.

"Let no man think that sudden in a minute
All is accomplished and the work is done;
Though with thine earliest dawn thou should'st begin it,
Scarce was it ended in thy setting sun."

One legend tells us that when Pandora opened the fateful box, all the winged blessings flew away and Hope alone remained. And though it almost seems as if all the winged blessings of our art had vanished beyond the dark cloud of mortality and morbidity that overhangs it, yet Hope remains, and even as we look at the shadow, we feel it must lighten and the winged blessings be seen hovering not far away; for the advances and the assurances of the past have shown us the means by which, if faithfully used, we may dissipate the clouds and render the art of obstetrics worthy of its high and beneficent purpose.

The Rôle of the Gonococcus.

It is no exaggeration to say that fully one-third of the women attending our hospitals as gynæcological patients are suffering from gonococcal infection or the legacies it leaves.

The most obstinate site of infection is the cervix. Here the gonococcus finds a secure resting place,

thriving beneath the folds of its mucous membrane and the glands which open into its canal. In the cervix it may persist in a very chronic form in spite of treatment or after remaining latent for years, it may suddenly light up into active virulence. Further, we can never guarantee a cure and we have, as yet, no trustworthy test of a permanent cure. Ricord's aphorism is as true to-day as when it was uttered: "Gonorrhœa begins and God alone knows when it will end."

The cervix is indeed the gonococcal storehouse. From this initial breeding ground come the organisms which may keep a woman infectious for years, and which may spread through the whole generative tract until they finally reach their great hunting-ground, the peritoneal cavity. The resulting pathological lesions become a prime factor in race suicide by arresting the normal function of the reproductive organs and destroying the purpose of a woman's creation. Much that we have to do as gynæcologists is to treat the end results by the removal of hopelessly diseased organs.

It has been truly said that a person with an active or latent gonococcal infection may be regarded as a far greater menace to the populace than a murderer. In the former, the victim is only one and the criminal is confined by law, while in the latter, the victims are many and often of the most innocent class and the contaminator of society roams at large.

Although the gravity of syphilis is now generally recognized, it is gonococcal infection and its sequelæ rather than syphilis that constitute the greatest danger to the national health. Gonococcal infection is a very much more devastating and crippling disease than syphills to womankind, for it causes 30% to 50% of all childless marriages, 14% to 17% of all cases of puerperal sepsis and 20% of all cases of blindness.

How are we to mitigate this colossal evil? Prophylaxis is, of course, the ideal aim. Nothing can be done to stamp out the disease at its source, until gonorrhœa is compulsorily but confidentially notifiable by name and prostitution is regulated and controlled. The attempt to legislate by flying the kite of lofty morals has proved a failure and it is extremely doubtful if much good will result from the lure of venereal clinics where all-comers can be treated at the public expense, without any effort being made at prevention. Organized crusades are made to combat tuberculosis, malaria and other scourges of humankind, while the efforts against the widespread and speedy dissemination of gonorrhœa are nugatory. Much can be done to diminish its spread by teaching the public to regard gonorrhœa as a very serious disease and to recognize the urgent necessity of early skilled treatment. Further, youth should be taught and guided in sexual matters. With miserable prudery the subject of sex hygiene is still enshrouded in mystery and regarded as filthy and to-day we reap the inevitable harvest of disease, misery and racial suicide, the greatest blot on our vaunted civilization. The policy of parental silence on sexual matters has not met with success. The home circle is the altar from which the initial teaching of sex education should come. The truth to the growing child from this source will last longer and stand against all other avenues of enlightenment. This knowledge can be confirmed and strengthened by proper instruction in private and public schools and will prove by results that the light of knowledge is more powerful than the darkness of ignorance.

Vis Medicatrix Naturæ.

The final results of pelvic infections depend upon the virulence of the invading organisms and the resisting powers of the individual. When the organisms once gain the upper hand, an acute general sepsis results. On the other hand, when the resisting powers are high, there will be a localization of the infection, either to its primary site or to some place in close proximity, such as the uterine wall, pelvic cellular tissue or pelvic peritoneum. Prenatal care, by raising the resisting powers, thus comes to be of the greatest importance. Careful attention to hygiene, *e.g.*, abundance of good food, fresh air and sunlight, freedom from mental anxiety, with sufficient physical exercise and rest, cleanliness by the daily bath and regulation of the emunctories, are all of great value in increasing the resisting powers of the gravida and so diminishing the liability to infection. The presence of any form of toxæmia during pregnancy, either of hepatic, renal or intestinal origin, is a great predisposing factor to infection. Proper prenatal care recognizes these conditions early. Prematernity clinics, homes or hospital beds are thus of the greatest possible value. How many lives have been saved annually by systematic examination of the urine during pregnancy and a careful prematernity examination of the pelvis about the thirty-sixth week of gestation? How much greater mortality and morbidity results from failure to carry out these simple prophylactic measures?

Whitridge Williams has recently drawn attention to the importance of syphilis as a frequent cause of fœtal death. He maintains that it is responsible for a greater fœtal mortality than toxæmia and that if syphilis could be eliminated as a cause of intrauterine death, greater progress would be made in prenatal care than by any other means. He advocates the application of the Wassermann test in every pregnant woman on registration in the prematernity clinic and the institution of intensive anti-syphilitic treatment whenever a positive reaction is registered. When such treatment is commenced before mid-term and efficiently carried, the "Wassermann" response becomes negative and remains so; the results show that syphilis is practically eliminated as a cause of fœtal death.

Let us not forget that the *vis medicatrix naturæ* can work wonders. Many severe pelvic infections end in complete recovery, thanks to the ability of Nature to localize and circumscribe them and to develope a specific immunity. Thus it is that the treatment of acute pelvic infections is becoming progressively conservative. Cases of "acute pelvis" with an inflammatory mass, gonococcal or streptococcal, are best dealt with on expectant lines. If pus forms, its evacuation by posterior colpotomy, breaking down and opening all pus cavities and

vaginal drainage is the operation of election. In streptococcal cases, when pus is in the broad ligament, it can be evacuated extra-peritoneally by a grid-iron incision just above Poupart's ligament. If the attack is primary and especially if it occurs in a young woman, it often clears up spontaneously under such management and the tubes remain patent and functionate perfectly.

The nature of the infection (tuberculosis alone excepted) or the size of the inflammatory pelvic mass is no contra-indication to expectant treatment, for Nature can work pelvic miracles. This cannot be wondered at in view of the protective function of the leucocytes and the remarkable "righting forces" of the blood, *e.g.*, antitoxins, opsinins, agglutinins and precipitins. Proper utilization of the *vis medicatrix naturæ*—Nature's methods of defence and repair—not only lowers the mortality, but takes no small share in conservative and preventive gynæcology.

These patients can be sent home after convalescence from the primary attack with strict injunctions to return if a relapse occurs. When recurrence does take place, radical operation should be urged during quiescence, on the principle that there will be repeated exacerbations of a persistent infection with progressive damage to the pelvic structures, more especially the ovaries.

Injudicious Gynæcology.

In the past the use of the uterine sound, tents, intra-uterine stems and the curette have been responsible for much pelvic pathology. The uterine curette still causes much preventible gynæcology. A host of ills follow in the wake of its injudicious use. It may, like the uterine sound, cause a gonococcal infection limited to the cervix to spread rapidly and form the acute inflammatory pelvic mass. In another class of cases where there has been an old slumbering infective salpingitis, it kindles the smouldering fire afresh and much pelvic damage is done before the flames die out. Most baneful of all is the indiscriminate use of the sharp curette in *post partum* sepsis, be if after miscarriage or full-time labour, where it opens up new avenues for infection and removes the protective leucocyte boundary wall. In this way an infection limited to the uterine interior spreads to all parts of the pelvis or may become generalized. If the uterus be empty, there is no need to interfere by active instrumentation and if anything is left behind, the finger is the best and safest means for its removal. The curette, which should be blunt and of rather large size, should be reserved for the exceptional cases, in which retained products are so intimately adherent that they cannot be removed by the fingers.

Many cases of "acute pelvis" with an inflammatory pelvic mass that follow miscarriage and labour owe their origin to the energetic use of the sharp curette. It is an unfortunate circumstance that this simple operation is lightly undertaken and much abused and has greatly increased the mortality and morbidity of *post partum* sepsis. Its baneful effects are manifest where pregnancy is interrupted at any time after mid-term and the dangers increase as the period of gestation advances.

Further, it should be our aim to make our gynæcological surgery as complete as possible. The omission to remember that many gynæcological lesions are multiple and can only be completely remedied by due attention to the various pathological conditions, is responsible for some failures. Our prime object is completely and permanently to cure each patient. Each case should be studied on its pathological complex and the complete operation plan of campaign carefully thought out beforehand and carried out on anatomical lines. If this is not done, our work is apt to be incomplete and the final results unsatisfactory. In this way indifferent gynæcology begets further gynæcology which is, of course, preventible.

Pseudo-Gynæcology.

This term may be applied to conditions that merely simulate gynæcology. It includes a considerable proportion of the "always ailing and never ill" type of women who present marked pelvic symptoms with a total absence of physical signs. We must assume the presence of a large element of neurasthenia, *i.e.*, symptoms pointing to a general exhaustion of the nervous system. These patients need great care in investigation and much judgement in their management.

When there is no definite pathological basis in the pelvis to work upon, we must be careful to avoid a hypothetical explanation. For example, in the common left ilio-pelvic pain, we should not invoke, in the absence of physical signs, a hypothetical congestion of the ovary, a varicose condition of the broad ligament or the presence of sigmoid or other adhesions in the pelvis or the all-but-mythical ovaritis.

We must ever remember that pathology is the key to diagnosis, prognosis and treatment in gynæcology. All good gynæcology, like good surgery, is based on pathology. No great building can ever be erected without sound and firm foundations. No gynæcological career will ever reach its full zenith without the bedrock basis of pathology.

On the other hand, many of these cases of chronic pelvic ill-health undoubtedly depend on definite local lesions which must receive prompt surgical treatment as a first step. The beneficial effects of complete rest and change which operation involves, is well seen in hospital among over-worked women. The few weeks' rest is often the first relief for years from household cares, the bringing up of large families and the sacrificial efforts to make ends meet on slender means. The rest in hospital for the necessary surgical treatment and a month's sojourn in a convalescent home work wonders in these worn-out, tired women.

In conclusion, in the past our province was to heal; in future, it should be to prevent. Fully three-fourths of the gynæcology of to-day is preventible; eliminate the results of *post partum* and gonococcal infections and parturient traumata and a small moiety remains—the congenital conditions and new growths.

We must ever have before us the ideal of medicine, to prevent disease whenever possible. With preventive medicine we have the moulding and shaping of a new race. The medical profession is awaken-

ing to a keen sense of duty in regard to the prevention of disease, but it is powerless to achieve success unless the responsible authorities fulfil their obligations to the public.

When medical men engage more freely in municipal and parliamentary life, we can hope for the legislation to pave the way for preventive gynæcology by the necessary steps being taken to diminish the enormous obstetric mortality and morbidity and the ravages of gonococcal infection. Let us hope for the fulfilment of Tennyson's words: "The old order changeth, yielding place to new." All real progress in the prevention of disease in the past has been on educational lines. Much can be accomplished by the education of the lay public by circulars, brochures and lectures dealing with the necessary prophylactic measures.

The Federal Government could work wonderful reforms in the course of years by diverting the money spent on the maternity bonus to the building of modern obstetric hospitals, equipping them with efficient staffs, with the extension of maternity charities by utilizing well-trained obstetric nurses working under medical supervision and gradually eliminating the midwife.

Permit me in the words of John Milton to exorcise the ghost of despair which sometimes haunts us, seeking to paralyse us as we grapple with such problems:

"Accuse not Nature, she hath done her part;
Do thou but thine."

Presidential Address.

SECTION OF DISEASES OF CHILDREN, AUSTRALASIAN MEDICAL CONGRESS, BRISBANE, 1920.

The Community and the Child.

By W. F. Litchfield, M.B.
Sydney.

Infant and child welfare is engaging the attention of peoples and governments in this and other countries to an increasing extent. In this movement there is the intention and opportunity to do good. It is necessary, however, that the objects and the means of attaining them should be as clearly understood as possible. Efforts may be easily misguided and energy wasted and even positive harm done for the want of forethought and foreknowledge. In this address I propose to discuss some of the principles and considerations of infant and child welfare. In doing this I am well aware of my limitations and the need for further study and research concerning the matter.

The first principle is that the infant must be cared for and protected against adverse influences of every kind. The new born babe is an entirely helpless and dependent creature and it is only slowly that its helplessness and dependence is shed and right through childhood and even adolescence protection and guidance are necessary. The survival of the fittest is a false doctrine when applied to young children. In my opinon it is a misconception in any case, but we cannot go into that debatable subject now. Sufficient is to say that the mother's instinct, which makes her cling to her child and protect it against bad influences, is a safer guide than the words of Darwin when he implies that excessive zeal displayed in preserving human beings from harm may lead to the survival of the unfit and be bad for the race.

The truth is that it is the best cared for in childhood that survive and come through with fewest scars.

I shall review the subject as it relates to the three periods: before birth, ante-natal; at birth, natal; and after birth, post-natal.

Pre-natal influences of a baneful nature are common. About thirty per thousand of all children born die as the direct result of congenital weakness or defect early in infancy and a considerable number of the survivors are handicapped throughout life from the same cause. It is unfortunate, however, that we have little knowledge of the factors at work in producing these conditions and a corresponding small amount of control over them. For the most part they are unpreventible. Congenital syphilis is a cause of death and sickness in infancy. The prevention of syphilis is a social problem and the treatment of syphilis a medical one and both are receiving acute attention. But syphilis forms only a comparatively small part of troubles originating before birth, for, as shown by Brend, the mortality from congenital causes is practically constant for urban and rural centres and for different social classes.

The act of birth is an event fraught with some danger to the child, but in the total takes but a small share in causing death or disability. The responsibility of this time rests with the nurse and doctor. It is desirable that both should be competent and well trained. It is the individual's business to see that they are well served in this direction and the business of the community, by providing hospitals and other attention, to see that no woman, owing to place or circumstance, is neglected at this time. I see no reason for socializing or nationalizing such services. I do not believe that the people wish to be relieved of their individual responsibilities in these personal matters, but I think the community should extend help where such is needed.

It is in the post-natal period that we find most scope for infant welfare work. If we state the present infantile death-rate in Australia in round figures as sixty per thousand births and allow that thirty per thousand die from unpreventible causes of pre-natal origin, then 50% of the total deaths under one year come within this period. These are all theoretically preventible. Morbidity and mortality run on parallel lines and what applies to one holds for the other. Intestinal and respiratory infections make up the majority of the troubles of this time. The important remedial measures include the general adoption of breast feeding, proper housing, efficient sanitation, a pure milk supply, a better knowledge of the food requirements of young children and continuous study and research.

Of foremost importance is breast feeding. This is best for the child, for the mother and for the household purse. Every mother can and should nurse her child. Something more than lip service to this doctrine is needed. The community should understand that this is the first essential in infant welfare and that, if the most be not made of it, they are only

playing with the subject. The work that Dr. Truby King is doing in this regard must be commended, encouraged and followed. The importance of the matter should be impressed on students and nurses. At present, as far as my experience goes, students and nurses do not receive proper instruction on this matter. The subject should be so presented to them that, by actual experience or by a proper appreciation of the experience of others it becomes part of their consciousness that breast feeding is essential for the welfare of young children. If this were done properly, then every nurse and every doctor would be in herself or himself a welfare centre for infants.

The community should see that no nursing mother is in actual need of the necessaries of life and no mother should have to give up suckling her infant in order to earn a living. Provision should be made for the mothers of illegitimate children to suckle their infants for at least six months. In New South Wales the State Children Relief Board offers such provision, but it is by no means fully accepted. No encouragement should be extended to these mothers to part with their infants. Two wrongs can never make a right.

The next consideration is proper housing. The essential thing here with regard to infants is that there shall not be overcrowding in rooms and that a number of young babies shall not be cared for under one roof. It is under such conditions that fatal infections and debilitating conditions occur. Babies' homes, foundling hospitals and hospitals for infants are all dangerous places for children under twelve months. I am satisfied that, with a properly organized system of boarding out, district nursing and help to mothers, there is no need for them. The housing problem is at present a serious and difficult one, but it always seems to me that it is intimately bound up with the question of quick and cheap transit in the neighbourhood of congested areas.

The next is efficient sanitation. The community, per medium of its health officers, is seized with the importance of public and domestic sanitation. It is not, however, fully appreciated that, though the drains, sinks, privies and ventilators of a house may be perfect, yet the house itself and the back yard may be fouled and contain the seeds of infection. The diarrhœal discharges of infants should be instantly disinfected and disposed of. Brend concludes that the cause of the excess of infant mortality in urban centres over rural districts is due to a polluted state of the atmosphere in the former. Hence, if we give weight to this view, efficient sanitation must include efforts to keep the air of cities fresh and clean.

Next, as cow's milk forms an important article of diet with children, sooner or later, it is necessary that such should be delivered fresh, free from contamination and in as uniform a state of composition and reaction as possible. Where the milk is not above suspicion, it should be scalded and cooled rapidly. Personally, I do not regard milk as the chief source of infectious diarrhœa in infants, but, however that may be, I am convinced that the origin, whether from food or not, occurs in the home. Hence it is after delivery that most care is needed to see that milk does not become infected.

Next, there is needed a better understanding of the essential food requirements of young children. Amongst medical men there is a lot of confusion and difference of opinion on this subject. We know that breast feeding is the best, but, beyond that, there is a lot of conjecture. The discovery of vitamines has thrown new light on the subject. Tweedy's theory that collostrium contains food antigens is suggestive. Anaphylaxis and immunity play a part. How far can carbo-hydrates replace fat without harm and what is the true significance of the low protein content of human milk are questions needing solution. The community, in the matter of infant feeding, can only be guided by the medical profession and the latter have not yet adopted a uniform standard.

Lastly, there is the need for research. This has already been partly indicated. Our knowledge of the bacteriology of infectious diarrhœa is imperfect and our understanding of the nutritional disturbances of infants very incomplete. The community should know the great value of research work and realize that money spent on it is never wasted and may yield high returns.

So far I have confined my remarks to matters relating to the period of infancy, but much of what I have said concerns also the well-being of young children. With regard to this later period I am tempted to refer to the need for better provision by the State for the isolation and treatment of infectious diseases in large centres of population and to enter a protest against over pressure of school work for boys and girls and especially for the latter at the time of puberty and the necessity for open spaces and playgrounds for the use of children in all closely populated centres. But I want to confine my concluding remarks to the case of the feeble-minded. That there is need for a comprehensive policy to deal with feeble-minded children does not admit of a doubt. The public must take cognisance of them, because, if not overlooked in some way, they may become a danger to others, as well as to themselves. I am in the habit of saying the whole problem is one of after care. That necessitates some kind of registration, the appointment of guardians who, in suitable cases, might be the patient's parents or relatives, and the establishment of homes where, after suitable classification, the uncared for ones could be segregated. I do not favour institutions for neglected, deserted or orphaned children in general and believe that for them boarding out and small cottage homes are the best, but for the feeble-minded segregation in properly managed institutions is desirable. Material for a comprehensive study of this question can be obtained from Sir Charles Mackellar's report to the New South Wales Government on the treatment of neglected and delinquent children in Great Britain, Europe and America, a publication which is not the least of the author's many efforts to improve the lot of neglected and dependent children.

In conclusion, I would like to say that I regard it as a great honour and privilege to preside over this section and I trust that the sessions now beginning will maintain the high standard of usefulness set by the Sections of Diseases of Children at the Congresses in Auckland, Sydney and Melbourne.

Presidential Address.

SECTION OF DERMATOLOGY, RADIOLOGY AND MEDICAL EECTRICITY, AUSTRALASIAN MEDICAL CONGRESS, BRISBANE, 1920.

By E. H. Molesworth, M.B., Ch.M. (Syd.),
Sydney.

Gentlemen, I have first to express my full and deep appreciation of the honour done me by the offer of the post of President of the Section of Dermatology at this Medical Congress. When the offer was first made, it appeared to me rather absurd, on account of my comparatively junior status in the ranks of dermatologists in Australia. It was only on finding out that the senior men were uncertain of their ability to attend or unwilling to accept the post that I could bring myself to accept the appointment. I feel it not only a high honour, but a great pleasure to preside at the deliberations of a section of medicine in which I take the keenest and most active interest.

With this introduction I propose to address you upon a subject which appears to me likely to interest you and to bring about some good effect in the future development of our specialty. Although probably one of the oldest and certainly widest of the specialties, its scope and boundaries are ill defined. Owing to the introduction of new methods and to some extent of new specialties there exists a good deal of overlapping, for example, with the radiologists, the venereal diseases specialists and even with the surgeons. This leads to confusion and to some extent jealousy in the allotment of duties in hospital practice and in private practice some disagreement also occurs.

The lines of development of dermatology in recent years have been quite clear and defined. The awakening of public interest in the venereal problem and the realization of the necessity for action have resulted in a strong impetus to the development of systematic treatment of syphilis. In most instances the skin department has been called upon to take a large share in the work, at any rate in administering the treatment of and to some extent organizing the campaign against syphilis. Unfortunately the skin departments have not all responded fully, a fact which I think is to be deplored, because the diagnosis, management and treatment of syphilis in its early stages is pre-eminently a skin man's work. There seems to be a *vis inertiæ* inhibiting the skin departments from entering into the task in a whole-hearted manner. But movement is now noticeable and I hope will gather pace, so that in the near future we may look forward to seeing this most important adjunct to the skin departments in full swing in every hospital.

The other line of development which strikes one as being most important, is the line of treatment by physical as distinguished from chemical agents. I speak in particular of X-ray and radium therapy, but wish also to mention ordinary light, heat and cold, high frequency and ionic medication.

The two latter I propose merely to touch upon briefly, since, though very useful in any skin department, they are not indispensable. With regard to the application of heat, more especially in the form of fulguration and cold, especially by means of CO_2 snow, it is only necessary to say that their use seems to become more and more essential to the proper conduct of skin clinics and practice.

But the treatment by X-rays or radium is to my mind of importance equal to, if not greater than, the systematic treatment of syphilis, in the development of dermatology. This for several reasons, but principally because of the extraordinary frequence of rodent ulcer in Australia.

While not desirous of introducing hypothetical statements into this address, I cannot refrain from making a reference here to the theory of causation of rodent ulcer and the prevention of *lupus vulgaris* in this country. The same race in England, Scotland and Ireland is subject to these diseases in the reverse order to their occurrence out here. The site of rodent ulcer is only the exposed portions of the anatomy; its incidence is much greater in man than in woman and much greater in men who follow outdoor occupations than in those who live more or less indoor lives. Moreover, it is commoner in that type which is less able to produce even browning as an efficient protection to the sensitive deeper layers of epithelium, *viz.*, the red Scot., the blue-eyed "beauty" Irish type, and the fair-haired Englishman—in that order. Darker types may show rodent ulcer, but rarely and only after prolonged and severe exposure; or the supposed rodent may be squamous epithelioma which is a much commoner occurrence in the skin as distinguished from mucous membrane and often of less malignancy than is generally supposed to characterize it.

Being therefore convinced in my own mind, I would like to suggest to others a notion which I know has been lingering more or less formed in their minds, that rodent ulcer is the effect of the stimulation of the ionizing effect of actinic rays of sunlight, a fact which explains the extraordinary frequency of rodent ulcer in a country where sunlight is so much more abundant than in the home where our race and type were evolved.

I now return to the subject of X-rays and radium, both of which are so efficient in the radical cure of this prevalent disease. The number of rodent ulcers and pre-rodent conditions requiring treatment is so great in an Australian skin clinic that we have been forced into more and more extensive use of X-rays and radium. I know we are all nervous about their use and I personally can answer for the risks of undertaking extensive X-ray treatment. But the amount of good that is done is so great and the harm so small in point of numbers affected in proportion to numbers treated, though it may be great in individual cases, that I cannot see that one is justified in neglecting this form of treatment. That a careful training and wise judgement is required goes without saying, but a surgeon does not shirk a dangerous operation, even though the disease may not be mortal and the anæsthetist has to run risks. I feel that we must not shirk the use of this form of treatment. The amount of therapeutic X-ray work demanded in a metropolitan hospital is enormous and no department is so dependent upon this form of treatment as the dermatological.

Unfortunately the demand for treatment by electrical and X-ray therapy of rodent ulcers and other diseases has brought us into theoretical rivalry with other cognate specialties, *viz.*, the venereal disease specialist and the radiographer. I hope, however, that these, our rivals, can work in amity when our paths cross. But careful and reasonable action has to be thought out to meet the difficulties arising in the allotment of hospital duties and it is on this account that I make the following somewhat dangerous excursion into the subject of definition of scope of the rival specialties.

There appears to me one very salient point which needs insistence. It is that the treatment of gonorrhœa cannot in any sense be regarded as part of a dermatologist's work. On the other hand, syphilis and chancroid are so largely characterized by skin lesions that the former, except when it is obviously effecting systematic changes, and the latter, except when suppurating inguinal adenitis requires surgical interference, belong definitely and inseparably to the skin department. Beside this, there is the fact that, until it became the custom to entrust the treatment of cases of syphilis to the dermatologist, no systematic effort was ever made to cope with the problem. The reason for this is easily seen when one remembers that no man does well a job in which he takes little interest; that the skin specialist alone regards a case of syphilis as interesting in and for itself and the treatment of it as an art in itself and not merely the drudgery that has to be performed while waiting for more attractive operative work. On the other hand, to my mind, the attempt to separate syphilis and to place it, together with gonorrhœa, in the hands of a new specialty either is foredoomed to failure or will result in diminished efficiency. The treatment of gonorrhœa is surgical, whereas that of syphilis lies in the physician's sphere of activity. If there is any one qualification necessary to prevent gross errors in diagnosis and treatment of this disease, it is a sound knowledge of diseases of the skin which may be simulated by or resemble the manifestation of syphilis. I put it to the meeting that the proper way to learn about syphilis is to learn it as one of the diseases of the skin and not as a venereal disease. I know that these sentiments will not meet with the approval of all present, but I feel them to be true and I think it is now time to bring about a definition of our specialty, in order to facilitate the allotment of duties in hospitals.

The next point at which overlapping occurs is with regard to X-ray work. In this connexion I will first of all personally disclaim any desire to interfere in the slightest degree with the radiographer's prerogative, but with regard to X-ray therapy a difficult situation presents itself. Every man practising in diseases of skin, especially in Australia, where rodent ulcer is so extremely common, finds himself compelled to use X-rays as a means of treatment in such a large proportion of his cases that in hospital work his contribution of work to the therapeutic X-ray department outnumbers all the other departments put together. Under these circumstances it appears to be only just he should have a large voice in the management of that department.

It is, however, almost impossible to allot the control of the X-ray therapeutic department in a public hospital to the satisfaction of all concerned, unless the skin department is given a separate X-ray plant and staff to perform the necessary therapeutic X-ray work, which can only be done, of course, in a hospital of the largest size. In order to obtain efficiency and to avoid friction, it appears to me highly desirable to effect this change in the larger metropolitan hospitals, leaving the therapeutic work required by physicians and surgeons in the hands of the radiographer. This is the least that those in charge of the skin department can be satisfied with. They should be prepared to carry the whole burden of the therapeutic work rather than allow so much of its work to be alienated from the department.

Finally, the present seems to me a very suitable moment to institute measures for the establishment of a suitable qualification for appointment to a skin department of the teaching and metropolitan hospitals. During recent years it has become evident to me, on account of frequent changes in the post of assistant physician of diseases of the skin at the Royal Prince Alfred Hospital that, in the absence of a recognized standard of study and attainment, appointments have to be made largely upon guess-work or influence. Although recognizing that a course of study in the special subject in Europe is highly desirable and almost essential for a proper grasp of the subject, I also feel that a great deal of the introductory work could be learned at our own universities and hospitals and the duration of a man's stay in Europe thereby considerably diminished. I have suggested to the Dean of the Faculty of Medicine at Sydney University that, in the organization of post-graduate courses proposed at the University, provision should be made for the teaching of the various specialties and for the establishment of a diploma of dermatology, etc., and for an M.D. in the special subjects and that some such qualification should be recommended as essential for eligibility as a candidate for a post in one of the special departments. This, it seems to me, would serve two good purposes. First, it would enable men who have to practise at a distance from the cities, to qualify themselves to perform what may be an important part of their practice much more efficiently than is possible under the present system. Secondly, it would afford a definite minimum standard to be attained by a candidate for a position in a special department.

As to how far these suggestions are applicable in cities where there is no medical school I am not prepared to state, but I think a definite effort should be made in the first place to define the scope of our specialties with only a reasonable degree of latitude and, secondly, to make special provision for post-graduate work in the specialties. This work might be rewarded by conferring a special diploma or degree in that subject.

The addresses of the Presidents of the Sections of Medicine, Surgery, Pathology and Bacteriology, Ophthalmology, Otology and Neurology will be published partly in the Congress Number (September 18, 1920) and partly in the issue of September 25, 1920.

Reports of Cases.

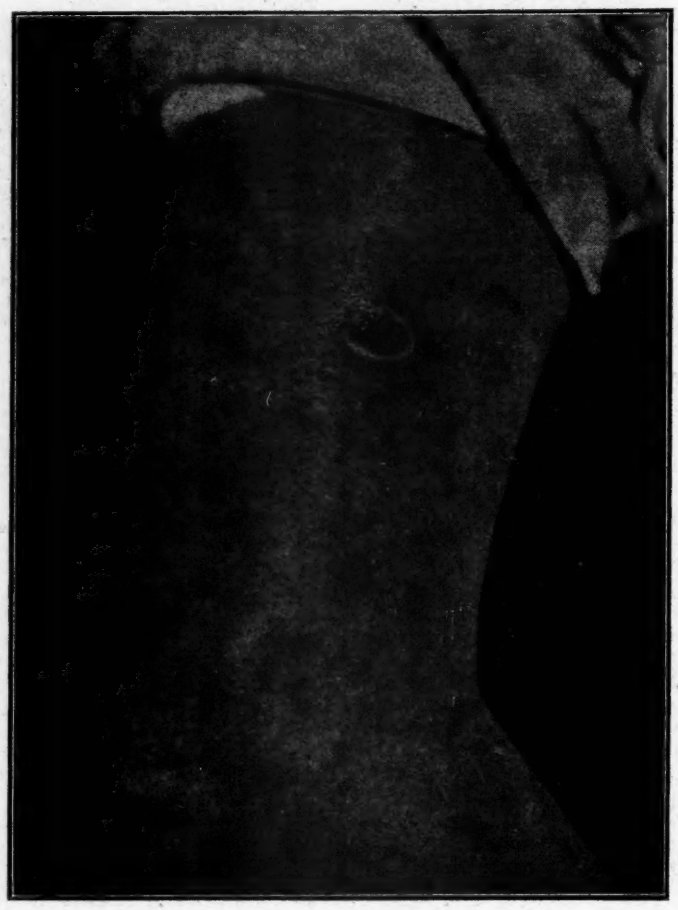
RODENT ULCER OF ARM.

By W. McMurray, M.D.,
Honorary Dermatologist, Sydney and Coast Hospitals.

Four cases are recorded of rodent ulcer occurring in this situation by Graham Little, S. MacKenzie, J. Hutchinson, jun., and myself. I wish to record a fifth case, which occurred recently in my practice.

The history, briefly, is as follows: Mrs. T., aged 62, mother of three children all born alive; no miscarriages; good health. Four months ago she received a blow on the left arm from a slamming door. A month later a little lump resembling a boil, appeared on the middle of the extensor aspect. The skin broke down in the centre, an ulcer formed about the size of a threepenny piece, exudating a thin, bloody discharge. It is spreading slowly, with a typical raised border and rolled edge. The unusual features of the case are that she complains of great pain when the sore is touched and a burning sensation when it is exposed to the air.

The accompanying photograph gives a good representation of the ulcer, showing its raised edges.



NOTES ON AN UNUSUAL CASE OF INTESTINAL OBSTRUCTION.

By J. Macarthur, M.B., Ch.B., B.A.O. (Q.U.B.), L.R.C.S.E.,
Honorary Surgeon, Pambula District Hospital; Government Medical Officer, Eden and District.

A girl, aged 14 years, was admitted to the Pambula District Hospital on the evening of June 23, 1920, suffering from severe abdominal pain and vomiting.

Family History.—The family history was good.

Previous Health.—She had always been puny, but had suffered from no definite illness. Four and a half years ago she had a severe attack of pain in the abdomen. The pain began on the left side and moved across the stomach to the right. There was no vomiting and the pain disappeared in a day or two. Last February a similar attack occurred, the pain again moving across the abdomen from left to right. It was accompanied by a sensation as of a band tied round the abdomen. On this occasion she had severe vomiting for three days. There was no history of any elevation of temperature. Appendicitis had been considered as a possibility, but had apparently been rejected. Enemata were given and the condition was relieved. Prior to this attack the child had been eating cucumber. This is the history as related to me by her father.

History of Present Illness.—On June 21 the patient was in good health until after tea. For tea she had rissoles made with sausage meat, of which she made a good meal. About an hour later she went out riding and then got a severe attack of pain. The pain was referred to the pit of the stomach, which felt like a "lump"; then the pain moved lower down towards the umbilicus. On the following day the bowels opened slightly after repeated doses of salts. The pain, however, increased in severity and the bowels did not act again. Vomiting began this same day and continued all day, the vomit consisting of green coloured water. These symptoms persisted all next day and, in addition, the abdomen became distended. She was now obviously very ill and was brought to me on the evening of June 23 and sent in to hospital.

On examination it was seen that the child looked ill; the face was becoming very white and pitched with each recurring pain. In the intervals of ease the face appeared free from anxiety and in complete repose. The tongue was coated with a thin white fur and was moist. The breath was offensive. Temperature was 37.2° C., the pulse-rate 120.

The abdomen was distended. The distension was most marked in the centre, the flanks being flat. The abdomen moved with respiration and, in the absence of pain, there was no muscular rigidity. Pains, much resembling labour pains, kept recurring at irregular intervals. Occasional peristaltic movements could be felt, but as each pain came on the abdominal muscles became taut and the patient doubled up. In the hypogastrium an indefinite doughy swelling could at intervals be felt. There was no other area of increased resistance.

A rectal examination revealed nothing. There was no swelling in or around the rectum and no discharge of blood or mucus. Urine was passed without difficulty and was normal in character, though scanty in quantity.

The foot of the bed was elevated and repeated enemata were given during the night. No sedative was given, only hot applications to the abdomen being employed to relieve the pain.

The temperature did not rise above 37.2° C. and the pulse continued at the previous rate. The patient had a bad night, the vomiting continued and the pain was very severe. No result had been obtained by the enemata, neither flatus nor fæces being passed. The distension had also increased. I now decided to operate.

The Operation.—A paramedial incision was made on the right side, with its centre at the umbilicus. This incision was enlarged upwards and downwards in order to deal with the intestines. The following condition was found. The caecum was very much distended and was with some difficulty lifted out of the pelvic brim. Its inner surface, with the appendix, was directed upwards and formed the doughy mass noted in the hypogastrium. The ascending colon was very distended, of a blue colour, with the veins of its mesentery very much swollen. This portion of the colon was displaced towards the middle line. On its inner side were distended coils of small intestine all congested, while on the outer side of the ascending colon were found about half the coils of small intestine collapsed and empty. The distended portion of small intestine was traced upwards and was found to disappear in a tight ring at the root of the mesentery. The collapsed intestine was withdrawn through this ring and consisted of about half the coils as far as the duodeno-jejunal flexure. The ring was now seen to consist of a part of the transverse colon, drawn into the consistency of a solid band. The distended colon, with the small intestine, had to be lifted out of the abdominal cavity before the volvulus could be untwisted. As soon as this was accomplished, the empty half of the transverse and the descending colon filled out. The descending colon had been of a dead white colour.

By passing a rectal tube the distension was relieved to such an extent that the intestines could be retained in the abdomen easily by a flat sponge, while the abdominal wall was sewn up.

After the operation the patient's condition was satisfactory, although the pulse-rate had risen to 130. There was no post-operative vomiting and the patient passed a very good night, quite free from pain. The convalescence was uneventful and the patient was out of bed on the tenth day, the wound being quite healed.

My best thanks are due to Dr. O'Reilly, of Bega, for his skilful administration of the anæsthetic.

The pre-operative diagnosis made in this case was acute obstruction due to internal hernia, a Meckel's diverticulum, or even an intussusception, though the latter was considered unlikely. What actually occurred was the result of an abnormally movable ileo-caecal segment. In this case the caecum and colon had a complete and unusually long mesentery. The twist had incarcerated the upper half of the small intestine. Eventually tightening itself and passing along the colon, it became locked at the fixed end of the small intestine, when symptoms of high obstruction occurred. The actual diagnosis was volvulus of the colon, with an associated obstruction of the small intestine. Recurrence should be prevented by sutures fixing the caecum.

Reviews.

THE RADIOGRAPHIC SIGNS OF PULMONARY TUBERCULOSIS.

The first volume of Dr. W. Overend's book on "Radiography of the Chest"[1] is devoted to pulmonary tuberculosis and is well arranged and excellently illustrated. The author uses a low milliampèrage technique, with exposures varying from five to seven seconds. He is evidently not conversant with the more powerful transformers with which chest skiagrams can be taken in a second or under without screens.

The method of examination follows orthodox lines; the upright position is advocated for all cases in which it can be applied.

After the discussion of the usual classifications of pulmonary tuberculosis, the author puts forward a classification, based on the radiographic appearances, which is simple and worthy of universal adoption. It is as follows:—

(*i.*) Tuberculosis of the bronchial glands.
(*ii.*) Disseminated nodular phthisis.
(*iii.*) Disseminated nodal phthisis.
(*iv.*) Broncho-pneumonic pseudo-lobar phthisis.
(*v.*) Chronic attenuated phthisis (minor phthisis).
(*vi.*) Fibroid phthisis.
(*vii.*) Pneumonic phthisis.
(*viii.*) Miliary tuberculosis.

This classification covers all forms of tuberculosis as seen in the lungs.

Glandular tuberculosis is subdivided into three groups according to the sets involved: (*a*) mediastinal, (*b*) hilar and (*c*) perihilar. These glands, when enlarged, are seen as greyish shadows and are readily recognizable; when caseous, calcified or fibrous, they are still more easily detected. The recognition of intrathoracic caseating glands is of great importance, as they are so often the primary focus in such conditions as tubercular meningitis. The author claims that the glands at the bifurcation of the trachea are best studied in the oblique position.

He states that the clinical criteria are of no value in the diagnosis of this condition and that it can only be diagnosed with certainty by radiography.

In later stages bronchiectasis and other changes may occur from fibrosis about the enlarged glands.

Broncho-pneumonic "phthisis" (caseating broncho-pneumonia) is described as existing in three forms, *viz.*: (*a*) nodular, (*b*) nodal and (*c*) pseudo-lobar. In the first the foci occur as small nodules; in the second they are large and multilobular; in the third they are formed by fusion of nodal deposits and exist as larger diseased areas.

It appears to us that the term "phthisis" in this connexion is undesirable. It should be abandoned. The condition is said to be secondary to caseating foci at the hilum and the infection is scattered throughout the lung by respiratory effort. The nodules are recognizable as shadows situated at the branchings of the bronchioles. In the nodal and pseudo-lobar forms the areas of dulness are larger and scattered through one or both lungs.

The physical signs are of little value and tubercle bacilli may be absent. Dyspnœa may be a prominent symptom, even when there is little visible change in the skiagram.

Perihilar forms of pseudo-lobar tuberculosis sometimes occur as primary lesions, but usually they are secondary to apical foci. Cavitation may occur with any of these forms.

Chronic "attenuated phthisis" is described as a slowly progressive process, which is often arrested. It generally occurs as a localized deposit, which may undergo caseous or calcarious degeneration. Smooth-walled cavities and bronchiectasis often occur. In these cases more or less localized shadows are seen, while the cavities give the usual appearance of a light area surrounded by more dense shadow. This form of lesion gives rise to the healed areas so often seen *post mortem*.

The various complications are dealt with and the radiographic appearances described. In the description of "fibroid phthisis," the author calls attention to the importance of Beclère's sign, *viz.*, the displacement of the mediastinum to the affected side on deep inspiration. The fibroid process often becomes more or less arrested and is classed as a chronic bronchitis or asthma. It is generally bilateral, but is more advanced on one side. The author points out that it may be recognized by the wavy shadows in the skiagram caused by the fibrous bands distributed along the bronchi.

Pneumonic and miliary tuberculosis are said to be secondary to apical infections, as a rule, but they may follow hilar or perihilar disease. In miliary tuberculosis the lung areas are seen to be studded with small foci, uniformly distributed.

The book should be of great value to the clinician, as well as to the radiographer. It contains a record of the clinical signs, as well as of the radiographic findings, in all these conditions. The skiagrams reproduced give a good idea of the actual intra-pulmonary changes which give rise to the various signs.

[1] The Radiography of the Chest—Volume I.: Pulmonary Tuberculosis, by Walker Overend, M.D., B.Sc.; 1920. London: William Heinemann (Medical Books), Ltd.; Demy 8vo., pp. 119, with 9 line diagrams and 99 radiograms. Price, 17s. 6d. net.

THE COOLIDGE TUBE.

We have received for review a small book[1] by H. Pilon on the Coolidge tube. It contains no new matter; the material has all been previously published in the radiographic journals either by the author or by Coolidge & Moore, of

[1] The Coolidge Tube: Its Scientific Applications, Medical and Industrial, by H. Pilon; Authorized Translation; 1920. London: Bailliere, Tindall & Cox. Crown 8vo., pp. 96, with 59 figures in the text. Price, 7s. 6d. net.

the General Electric Company. But the information conveyed in its pages is nevertheless of value.

The general construction of electron tubes is described and the two forms in which it is procurable and their use are fully described. The author quotes freely from the work of Coolidge and Moore in the description of radiations from points other than the focal spot. The stability of the tube under various conditions is discussed and the author's experience has borne out the experience of the inventor, *viz.*, that instability is found only in induction coil outfits and is not met with in transformer apparatus. This instability can be traced to the inherent defects associated with induction coil construction.

Tungsten as a target is quite equal to platinum and its higher melting point is a very valuable property. The tube gives as clear definition as the ordinary gas tube and Pilon can distinguish no difference in skiagrams taken under similar electrical conditions by the two types of tube.

Radio-metallography is but lightly handled. It is somewhat disappointing that there should be so little from one of the pioneers in this branch of radiography. Protection is discussed, but the methods described would be found too cumbersome for inclusion in a busy radiographic department. The book can be confidently recommended to those who desire a theoretical knowledge of the modern Röntgen ray tube.

Naval and Military.

APPOINTMENTS.

The following appointments, etc., have been notified in the *Commonwealth of Australia Gazette*, No. 72, of September 2, 1920:—

Australian Imperial Force.

Second Military District.

Lieutenant-Colonel C. L. Chapman, D.S.O., Australian Army Medical Corps, having resigned, his appointment in the Australian Imperial Force is terminated in England on 26th May, 1920 but to take effect from 25th July, 1920.

Major G. A. M. Heydon, Australian Army Medical Corps, having resigned, his appointment in the Australian Imperial Force is terminated in England on 26th June, 1920, but to take effect from 24th August, 1920.

Major G. C. Willcocks, O.B.E., M.C., Australian Army Medical Corps, relinquished appointment as Assistant Director Medical Services, Administrative Headquarters, Australian Imperial Force, 23rd April, 1919.

Fourth Military District.

Lieutenant-Colonel H. C. Nott, Australian Army Medical Corps, relinquished appointment as Senior Medical Officer, Australian Base Depôts and Senior Medical Officer, 1st Australian Convalescent Depôt, 1st July, 1919.

APPOINTMENTS TERMINATED.

Third Military District.

Major T. Cherry, 23rd July, 1920.
Captain F. A. Bouvier, 12th July, 1920.

Fourth Military District.

Captain G. S. Shipway, 8th August, 1920.

Australian Naval and Military Expeditionary Force.

To be Major, Army Medical Corps—

Captain H. St. J. Mitchell, 1st August, 1920.

Australian Military Forces.

Second Military District.

Australian Army Medical Corps—

The provisional appointment of Captain H. Sutton is confirmed. Captain Albert Reginald Heupt, having changed his name by deed poll, will in future be known as Albert Reginald Heupt McLeod.

Third Military District.

Australian Army Medical Corps Reserve—

To be Honorary Captain—

Frank Longstaff Apperly, 1st July, 1920.

ST. PETER'S HOSPITAL FOR STONE AND OTHER URINARY DISEASES.

In the annual report for the year 1919 of the Committee of Management of St. Peter's Hospital for Stone and Other Urinary Diseases in Henrietta Street, London, we note that Dr. R. J. Silverton held the position of House Surgeon during a portion of the year. The work carried out at St. Peter's Hospital has for many years commanded the respect and attention of surgeons interested in urology. The statistics published in the annual report are of considerable interest. It appears that suprapubic prostatectomy is performed for benign hypertrophy of the prostate rather more than 100 times every year. In 1916 104 patients were subject to this operation and eight of them died; in 1917 there were 122 with eight deaths; 1918 105 with five deaths and in 1919 110 with ten deaths. The total number of patients admitted during 1919 for prostatic enlargement was 116. In addition there were 11 patients with malignant disease of the prostate. Of these, seven were subjected to operation, six by the suprapubic method and one by the perineal method. Five of the six patients died.

Of 38 patients suffering from vesical tumours, all but five were dealt with surgically. There were 23 instances of benign tumours. In 18 of these cases excision was carried out successfully. Radium treatment was instituted in another case and the result was satisfactory. In four patients the treatment consisted in the establishment of permanent drainage. Resection of the bladder was performed 15 times for malignant disease. One of the patients died.

A good record has been established in regard to the treatment of vesical calculus. For some reason not immediately evident the number of cases dealt with in 1919 was appreciably smaller than in the preceding years. In all, 38 patients were subjected to treatment for bladder stones. Of these, 32 were subjected to litholapaxy and six to suprapubic lithotomy. One patient of the 32 died. During the decade 1864-1873 the death-rate of operations for stone of the bladder was 15.25%. No improvement followed in the next decade, but from 1884 onwards there has been a gradual lowering of the mortality. In 1919 it reached its lowest ebb at 2.6%.

In regard to diseases of the kidney the record is also good. Nephrectomy was performed 16 times for renal tuberculosis, with recovery in each case. Two patients with malignant disease of the kidney were treated by nephrectomy. One of them died. A third patient suffering from the same condition was in too far advanced a stage to admit of the removal of the organ. Nephrectomy was also performed twice for pyonephrosis, with happy results. Success also attended all the nephro-lithotomy, pyelo-lithotomy and uretero-lithotomy operations performed. Only five cases of movable kidney were dealt with; of these, two were treated nephropexy with satisfactory end results.

INTRA-CEREBRAL PRESSURE IN EPILEPSY.

Dr. T. J. Brooke-Kelly, of Brisbane, writes that he has had three patients suffering from epilepsy under operation. In each a trephining operation had been performed, but no improvement had resulted. Dr. Brooke-Kelly has noted that during every epileptic seizure the tissues were sucked into the trephine apertures. He presumes that the intracranial contents decrease in capacity during the fit.

These observations are suggestive. It has frequently been noted that the blood pressure in some, but not all, cases is lowered immediately before the fit. On the other hand, every surgeon with experience of trephining for idiopathic epilepsy is familiar with the bulging of the *dura mater* and cranial contents when the skull is opened. Our knowledge of the conditions governing intra-cranial pressure in its relations with blood pressure and with disturbances of the cerebral circulation is lamentably meagre.

The Medical Journal of Australia.

SATURDAY, SEPTEMBER 11, 1920.

The British Medical Association in Australia.

Among the many matters dealt with by the Federal Committee of the British Medical Association in Australia at its meeting held in Brisbane on August 25, 1920, none affects the members more profoundly than that dealing with the proposal to alter the constitution of the Association. We have endeavoured to enlist the interests of members in a recent issue in this proposal, notwithstanding the fact that the exact nature of the changes cannot be anticipated at this stage. For several years the Branches in the Commonwealth have sought a greater degree of autonomy and of elasticity of action than they possess at present. Difficulties have presented themselves whenever the suggestion was made that the individual Branches in Australia should become incorporated under the State laws to enable them to apply any or all of the measures used for the attainment of the objects of the Association in Great Britain. It is unnecessary to traverse the arguments employed against the adoption of this expedient of incorporation of Branches. Suffice is to state that many years ago the Council of the British Medical Association sanctioned the formation of a company in New South Wales having a membership identical with that of the New South Wales Branch and having a memorandum of association, articles and by-laws corresponding to the memorandum, articles and by-laws of the parent Association. The New South Wales Branch thus adopted a dual existence. The incorporated body was able to do certain things specified in the memorandum and articles of the British Medical Association which a Branch was not empowered to do. It has been admitted in a frank manner that the powers and relative independence acquired by the New South Wales Branch or its *alter ego* have been wisely and judiciously used to the immense advantage of the medical profession. Nevertheless, the Council in London has hesitated to give other Branches similar sanction, lest the Association should become involved in so complicated a series of organizations that the central machinery would prove insufficient to exercise the essential control. The Council now proposes to introduce into the constitution a new principle. By the admission of corporate bodies to membership, the Association would become in part a federation of medical societies. In the main the division would remain as before the unit. If a conclave of medical practitioners sought incorporation under company law and this society were admitted to the membership of the Association, its status would probably be determined by its relationship to an existing Division of the Association. For the rest the efficacy of the altered machinery must depend on the manner in which the requirements of the Branches in Australia are met. The Representative Body has accepted the general proposition and has authorized the Council to convene a conference between representatives of the overseas Branches, representatives of the home Association and possibly representatives of medical societies seeking admission as members with the Council. The future of the British Medical Association in Australia will depend to a large extent on the manner in which the views of our Branches are presented and on the ability of the representative to examine the practical proposals before they are adopted.

In these circumstances the Federal Committee has determined that a special emissary should be selected. The qualities of a suitable representative are not commonly possessed by medical practitioners. He must have a sound understanding of company law in general and in especial of the constitutional abilities and disabilities of the British Medical Association. He must be fully seized with the requirements and desires of the medical profession in the Commonwealth and with the experience of each Branch of the British Medical Association in Australia. He must be accustomed to handle medical men in debate and must be very wide awake, lest an important opportunity escape his notice. The Committee recognizes that there are few qualified for the task. The service which a suitable representative would render to the Australian Branches, would be of immense value. It is therefore essential that the representative should not be asked to travel to England on this mission at a pecuniary loss. His expenses should be defrayed.

The allowance should be generous. The representative would have to absent himself from the Commonwealth for five or six months. The Federal Committee, after having taken into consideration the increased cost of travelling and of living, estimated that the sum of £1,000 would probably be required for this purpose. This amount can only be provided by a levy on the members of 7s. 6d. each. The Branches, it is felt, will agree to increase the subscription to enable this highly important task to be performed in a satisfactory manner. A wise decision will make all the difference to the Australian Branches of the British Medical Association.

THE THERAPEUTIC USE OF OXYGEN.

For many years the administration of oxygen by inhalation as a kind of *dernier ressort* has been employed for patients exhibiting signs of cyanosis and oxygen starvation in acute respiratory affections, such as lobar pneumonia, or in cases of poisoning by carbon monoxide or other toxic gases. The method commonly adopted, which consists of holding an inverted funnel connected to an oxygen cylinder in proximity to the face of the patient, is obviously so inexact and unsatisfactory that in the minds of many the procedure has come to be regarded as of doubtful therapeutic value. Apart from the inefficiency of such a primitive method of administration, the objection has been raised on theoretical grounds that as the oxyhæmoglobin of the blood is already nearly saturated, no increase in this can be obtained by the mere raising of the percentage of oxygen in the inhaled air.

Of recent years the researches of Haldane, Leonard Hill and others have contributed greatly to the knowledge of the physiological aspect of this question and their conclusions have in many instances received practical confirmation by the experience gained in the employment of oxygen inhalation in the treatment of patients suffering from the effects of breathing irrespirable gases during the late war.

In discussing the indications for the administration of oxygen from the physiological aspect, Dr. R. D. Rudolf[1] points out that when a healthy individual is breathing quietly the percentage of oxygen in ordinary air (20%) is not only enough to saturate his hæmoglobin to a sufficient degree and to supply the necessary partial pressure of oxygen in the blood plasma, but that the percentage of oxygen in the inhaled air may be reduced to as little as 14% without causing any distress to the patient. On exertion, when breathlessness supervenes, the symptoms of distress may be relieved by an increased supply of oxygen. Leonard Hill and others have shown that a man can do more physical work without distress when breathing an atmosphere artificially enriched with oxygen. Under normal conditions the difference between the oxygen required by a man at rest and the oxygen available in ordinary air represents what has been termed by Meltzer "a factor of safety," which is sufficient to meet the increased demands of ordinary exertion, but is not enough for emergencies. A patient suffering from interference with the pulmonary ventilation may be likened to the healthy man undergoing extra exertion. It is a well-recognized fact that at high altitudes the partial pressure of oxygen is so reduced that the margin of safety is diminished and the least exertion may bring on symptoms of oxygen starvation, as occurs in mountain sickness and in aviators at a considerable altitude.

The term anoxæmia has been applied by Haldane to the condition which exists when the rate of supply of oxygen is insufficient for the normal carrying on of life. The causes of anoxæmia may be classified into four groups:—

(*i.*) Defective saturation of the arterial blood with oxygen.
(*ii.*) Slowing of the circulation.
(*iii.*) Defective proportion of available hæmoglobin in the blood.
(*iv.*) Alteration in the dissociation curve of oxyhæmoglobin.

In considering the effects of oxygen starvation of the tissues of the body, it is important to remember that the amount of oxygen in the blood plasma is an essential factor. This is usually stated to be about one-fortieth as much as is contained in the oxyhæmoglobin from which it is constantly replaced as it is used up by the tissues. It has been shown that under certain conditions by sufficiently increasing the oxygen in the inspired air, it is possible to increase the partial oxygen pressure in the plasma as much as seven times. Therefore from the point of view of practical therapeutics, cyanosis in a patient must be regarded as an indication that oxygen inhalation should be considered. It is to be borne in mind that anoxæmia may be clinically manifested by the leaden colour of the skin often seen in acute respiratory conditions when the oxyhæmoglobin is reduced and yet the veins are not overfull, just as in the conditions exhibiting marked cyanotic engorgement of the mucous membranes with venous distension calling for venesection.

The question of the methods to be employed for the efficient administration of oxygen by inhalation is a matter of very great practical importance. Meltzer has shown that the method of using an inverted funnel already alluded to, is incapable of enriching the alveolar air by more than 2% and is therefore of little practical utility. The Haldane apparatus devised during the war for the treatment of patients suffering from the effects of gas marks a decided improvement, in that a regular percentage of oxygen can be administered over a continuous period. An objection to this method is that the patient is liable to resent the application of a mask and frequently struggles in endeavouring to remove it. A simpler method extensively used for gassed men during the war is described. A soft rubber tube was inserted into one nostril and a stream of oxygen allowed to flow gently into the nose. The amount of oxygen inhaled could be increased by rhythmical

[1] *American Journal of Medical Sciences*, July, 1920.

closure of the opposite nostril by an attendant during each inspiration. This method is stated to have been found efficient, but is obviously wasteful and does not deliver a measured quantity.

Towards the end of the war Barcroft, of Cambridge, constructed oxygen chambers in which patients could be placed in an atmosphere containing 40% to 50% of oxygen. Except for the great expenditure involved, an equipment of this nature should prove of very considerable value in hospital practice and such chambers have indeed been installed at some of the larger hospitals in the old world.

A simple apparatus has recently been introduced by Meltzer, of the Rockefeller Institute, consisting of a hollow tongue depressor connected with a gas bag and fitted with a valve so that during inspiration oxygen enters the mouth under pressure, whereas the flow of the gas is checked during expiration. It is claimed that efficient oxygen insufflation may be attained in this manner.

Although it may be argued that administration of oxygen to patients suffering from cyanosis can be at best but a palliative measure, seeing that the cause of the pathological condition is not removed thereby, yet the procedure is strongly advocated by physiologists of eminence, Haldane and Barcroft.

It has been maintained that the temporary respite gained for the organism by this means may reasonably turn the scale in favour of recovery in certain critical emergencies. It is to be hoped that with improvement of apparatus and technique, this method may prove to be of more definite value in the treatment of patients than has been the case hitherto.

SYPHILIS OF THE KIDNEY.

The importance of the incidence of syphilitic infection of the kidney appears to have attracted but little attention from the earlier authors. Dr. Loyd Thompson[1] states that, although syphilitic affections of the kidneys were apparently not appreciated by the earlier syphilographers, Rayer, in 1840, first recognized the condition clinically. Others had previously regarded the pathological changes found in these organs as attributable to the effects of the mercury used in treatment. From a study of the statistics the author considers that the estimate of Osler that acute syphilitic nephritis occurs in 3.8% of all cases of syphilis in the secondary stage is considerably too high, although transient albuminuria is frequently found early in the course of the disease, which may be regarded as comparable to the similar condition observed in other infectious diseases. It is stated that this condition is probably due not to an actual invasion of the kidney substance by spirochætes, but to the excretion of toxic substances produced by these organisms during the course of the general systemic infection. Degenerative changes are produced in the epithelium of the convoluted tubules and a serous exudation occurs in the glomeruli. Acute syphilitic nephritis has also been described, the gravamen of the infection falling upon the lining epithelium of the tubules, spirochætes having been demonstrated in the kidneys of patients who have died from this cause. In the subacute type the glomeruli also become severely involved in the pathological process.

In the later stages of the disease chronic parenchymatous and interstitial changes are recognized, the histological picture being similar to that of chronic nephritis from other causes.

Amyloid degeneration of the kidney may result in chronic cases, differing in no respect from amyloid disease following other chronic infections. Gummata of the kidney are not common, but may occur as single or multiple tumours. Not infrequently the kidneys of syphilitics present evidence of a sclerogummatous process in which, in addition to small multiple gummata, there is a diffuse atrophic sclerosis with hyaline degeneration of the glomeruli and atrophy of the convoluted tubules. Endarteritic changes in the blood vessels are frequently observed. It is important to observe that involvement of the kidney as evidenced by transient albuminuria may occur very early in the stage of general infection. It is a frequent accompaniment of the early cutaneous manifestations.

Acute syphilitic nephritis may occur at any time following the primary infection. Of 26 such cases reported by Fournier, 11 developed during the second month. The average time of onset is stated to be about the fifth month. The author states that renal function seems to be impaired considerably less than in acute nephritis due to other causes. The clinical importance of these observations is manifested when it is borne in mind that the acute nephritis may precede the cutaneous manifestations of the disease, so that the ætiological basis may remain unrecognized. It is stated that nephritis developing in a syphilitic undergoing intensive mercurial treatment may be differentiated since improvement follows the suspension of the mercurial administration.

The recognition of early renal involvement in syphilis is of great importance, since in the presence of gross renal disease the modern intensive methods of anti-specific treatment must be employed with extreme caution.

[1] *Journal of the American Medical Association*, July, 1920.

It is with great gratification that we learn that the Department of Education of Victoria is about to appoint two additional school medical officers. We have frequently called attention to the parsimonious methods adopted by the Government in dealing with one of the most important of its obligations to the community. During the greater part of the period of the war the Senior School Medical Officer, Dr. Harvey Sutton, was on active service and the impossible task of controlling the health of close on a quarter of a million school children was imposed on two medical officers, Dr. Jane S. Grieg and Dr. Eileen Fitzgerald. The appointment of two medical officers is a step in the right direction, but it is not nearly a big enough step.

The death of Dr. Timothy Augustine Hynes, of Henley Beach, South Australia, took place on August 30, 1920. Dr. Hynes, who was 55 years of age, had been in ill-health for many years.

Dr. A. E. Finckh requests us to announce that he has removed his laboratory from Macquarie Street to 87 Phillip Street, Sydney.

Abstracts from Current Medical Literature.

MEDICINE.

(94) Hyperchlorhydria.

R. H. Rose defines hyperchlorhydria as a functional disease of the stomach, characterized by an increased secretion of hydrocloric acid during the process of digestion to a point above normal or sufficient to produce symptoms (*New York Med. Journ.*, April 10, 1920). Acid gastritis, though similar, involves inflammation and the presence of mucus, varying from mild forms, which are little more than hyperchlorhydria, to severe forms, which may be differentiated from ulcer with difficulty. Hyperchlorhydria is more common up to the age of fifty. With the advance of years the glands of the stomach lose their power to respond to stimulation. Seasonings and condiments, which are not essential to the diet, are common causes of hyperchlorhydria. Rapid eating, improper mastication, excessive drinking of coffee, sour or sweet wine and excessive smoking are frequently responsible for this disease. Appendicitis, ulcer and gall stones are responsible for many cases. Intestinal stasis may also produce it. At first there is no pathological change, the acidity being due to stimulation of the glands. Later there is proliferation of the glandular elements. In some cases there is no associated pain. The patient generally feels better after meals. As soon as the albumin in the meal is saturated with hydrochloric acid and a sufficient surplus has accumulated, the symptoms begin. The pain is generally relieved by eating an egg, drinking milk, taking alkalies and, to a certain extent, by taking water. The appetite is above normal. There is frequently a burning sensation in the pit of the stomach or in the lower end of the œsophagus under the sternum. Vomiting is rare; if it empties the stomach, it may afford relief. Constipation is frequently associated as a symptom and may be an underlying cause. Generally the stomach is tender only when pain is present. The tenderness extends over all that area of the stomach which is in contact with the abdominal wall. In gastric ulcer the pain is localized. Nutrition of the patient is usually well maintained. After a Ewald test breakfast, the normal value for free hydrochloric acid is found to be 20. The normal amount of combined acid is 20. The normal total acidity is 60. In hyperchlorhydria the value for free hydrochloric acid is 30-80 or more. The combined HCl is the same as normal and the total acidity is increased to 70-120 or more. The chief complications are hepato-intestinal toxæmia, *atonia gastrica* and intestinal stasis. Gastritis with increased acidity closely resembles hyperchlorhydria. Acid gastritis is hyperchlorhydria *plus* inflammation, with excessive mucus in the gastric contents. The presence of mucus is an indication for lavage or some other method for its removal. In hyperchlorhydria lavage is also used to lessen the sensitiveness of the mucous membrane and, by the employment of astringent solutions, to reduce secretion. Continuous secretion of gastric juice is closely allied to hyperchlorhydria, but differs through the fact that this secretion occurs between as well as during periods of digestion. Symptoms of distress occur during the night and in the period just preceding meal time. This disease is more likely to have an underlying cause of a surgical nature, such as ulcer, chronic appendicitis or disease of the gall-bladder. The prognosis depends on the removability of the cause. It is frequently difficult to remove permanently the ætiological factors, dependent as they are on the mode of life and environment. When the patient improves a little, he is likely to go back to the old manner of living. Return of the trouble is the result. The use of vinegar, lemon and all acids should be prohibited. In the beginning it is better to stop fruit altogether and later to allow one article at a time, as it may be found to agree. Hot seasonings, spices, mustard, pepper, hot sauces and tobacco must not be taken. Onions and garlic should be avoided and radishes, cucumbers, lemon and pineapple ice, ginger bread and highly season turkey dressing are forbidden. Coffee is a gastric irritant. Concentrated sugar solutions are bad. Fats diminish secretion, are non-irritating and, in the absence of hepato-intestinal toxæmia, may be given freely. They also have a salutary effect on the constipation, which exists in one-third of the cases. Olive oil, cream and unsalted butter may be used with benefit. The oil, when given shortly before meals, supplies valuable nutrition, is soothing to the mucous membrane and lessens the pain. Crisp bacon is advisable. Concentrated forms of carbo-hydrates are best. Potatoes, mashed or baked, bread, twice baked and partly dextrinized, should be used. Finely divided cereals agree and dry cereals are well taken. Asparagus, peas and spinach strained and eaten as *purées* are more likely to agree than coarse vegetable in severe cases. Milk, eggs, white meat of chicken, fish, well cooked lamb, veal, mutton and beef are useful foods. All rich gravies should be avoided. Cocoa, weak tea, water and the alkaline mineral waters agree. Carbonic acid often has a sedative effect. Drugs are used to counteract the effects of acidity by neutralizing the HCl and by soothing the mucous membrane and relieving constipation. *Magnesia usta* neutralizes twice its weight of HCl and is four times as efficacious as sodium bicarbonate. Belladonna may be employed to decrease secretion, alone or combined with alkalies. Bismuth subcarbonate is very soothing. If constipation is more marked than acidity, rhuburb may be combined with the alkalies. Silver nitrate may be used, in doses of 8-32 mgr., in a glass of water half an hour before eating. It may also be used as a wash in 1-20,000 to 1-10,000 solution; but this is seldom necessary. Silver tends to reduce secretion and the sensitive condition of the stomach. Pain may be severe enough to require codeine. Frankly nervous patients are benefited by sodium bromide.

(95) The Pineal Gland.

W. N. Berkely states that the pineal gland, while relatively more active in early life, does not atrophy with sexual maturity (*Medical Record*, January 3, 1920). It retains throughout life a fairly definite size and any function it may possess in infancy is probably not altogether abrogated in adult years. Physiologically it is a true organ of internal secretion. In a succession of tumours of the pineal glands, the symptoms have been similar. Signs of cerebral tumour in the region of the *corpora quadragemina*, concurrent with abnormal growth of the body, early appearance of axillary and pubic hair and remarkable sexual and mental precocity are grouped definitely as the "pineal syndrome." Preparations of pineal gland, obtained fresh from calves and young cattle, accelerated the somatic growth of kittens, rabbits and guineapigs to a marked degree. A number of backward children, without organic stigmata, to whom the gland was administered for from three to six months, made an advance in mental age considerably in excess of any previous progress for a like period. The writer's opinions seem to be contradicted by the removal experiments of Dandy and Horrax; but he thinks that such excision experiments, involving a profound disturbance of the circulatory and anatomical relations of almost the entire brain, will have to be excluded. Glandular deficiencies often do not come singly, and pineal gland therapy must often be combined with other secretions. A dry skin, cold extremities, obstinate constipation, excessive mental hebetude, irregular and imperfect eruption of the milk teeth and low blood pressure, may necessitate the addition of thyroid. When the physical, as well as mental, growth is retarded and there are changes in the size of the *sella turcica*, or increased carbohydrate tolerance, great obesity, or a systolic blood pressure below 50 mm., the anterior or middle lobe of the pituitary, or both, should be added. When the patient is a boy and has minute and soft testes, testis should be given. Sometimes several of these conditions coincide and a pluriglandular formula, all in minute doses, may be tried. The author believes that pineal gland will ultimately become a standard remedy for speeding up the sluggish cerebral chemistry of many backward children. The cases must be selected with reasonable care, permanent organic damage to the child's brain being usually an absolute contra-indication. In old people it will quicken the slowed down mental processes, improve the memory and produce a remarkable cheerfulness and sense of well being. It will not restore hardened arteries or a dilated heart.

NEUROLOGY.

(96) Lethargic Encephalitis.

In connexion with the sequelæ and morbid anatomy of lethargic encephalitis, E. Farquhar Buzzard and J. C. Greenfield (*Brain*, Vol XLII., Part IV., 1919) contribute a long paper based on the observation of 22 clinical cases and five autopsies with full microscopical examination. They state first that the question of the relation between influenza and *encephalitis lethargica* cannot yet be answered. They then show that *encephalitis lethargica* is not characterized merely by asthenia, lethargy and disorder of ocular movements, as was first supposed, but that a great variety of symptoms and physical signs, as well as interesting late phenomena, may arise. This is not astonishing, since pathological examination shows that the disease is always more wide spread than might be suspected from the most prominent symptoms. They point to and give records of three groups of cases, characterized (1) by hemiplegia, hemianæsthesia, hemianopia, etc.; (2) by symptoms resembling those of *paralysis agitans*—the basal ganglia group; (3) by disturbances of function of the cranial nerves. They also describe mild cases characterized by insidious, slight lethargy and transient diplopia, or mere slowness of muscular movements. All the patients recovered rapidly. They also deal with severe cases, which are as rapidly fatal, some even suggesting the possible presence of cerebral tumour, abscess or hæmorrhage. As sequelæ, they refer to the late development of involuntary movements, affecting the limbs, jaw or tongue, in some cases choreiform, in others more rhythmical. Relapse of symptoms months after the original illness is recorded. The summary regarding prognosis is that some recover completely, others survive the acute state, but carry a legacy of permanent defects, others die either from toxæmia or hæmorrhage in the acute illness. The histological changes common to all cases in the early stages are vascular congestion affecting all vessels down to the smallest capillaries, toxic degeneration of nerve cells and neuronophagy, proliferation of the mesoblastic cells of the vessel walls and infiltration of the tissues with these cells, small-celled infiltration of the Virchow-Robin space around the veins and glial proliferation. Venous thromboses, perivascular hæmorrhages and infarctions were all occasionally seen. The parts examined were the cerebral cortex, the basal ganglia, the pons and the medulla.

(97) The Functional Significance of the Cerebellum.

Frederick Tilney (*Neurological Bulletin*, August, 1919) surveys our knowledge of the cerebellum from a threefold standpoint. The first part of his paper consists of a general consideration of the evolutional significance of the cerebellum, in which the work of Elliott Smith and Bolk is largely drawn upon. In part two the functions of the cerebellum are discussed, the product of those workers, experimental and clinical, on the localization of function in the cerebellum being given a prominent place. Lastly, the cerebellum syndrome, based on the examination of a very interesting case, is set forth as follows: (1) Asynergia as manifested in the pendulous knee-jerk; the asynergia major, which gives rise to the staggering gait, caused by dissociation of synergic units of the trunk and extremities and the decomposition of synergic movements; the inco-ordination of station due to the same causes; the asynergia minor, shown in the past-pointing, finger-to-finger and finger-to-nose tests; the dysmetria, or improper measuring of extent, rate and force of volitional movements; the adiadocokinesis, or failure to produce succession movements (pronation and supination of the forearm); the rebound phenomenon of Holmes; the tremor on voluntary movements, which consists of irregular oscillations of the arms, legs and head; the irregular persistent nystagmus and the asynergic speech disturbances, resulting in scannng, slurrng and explosive articulation. (2) The absence of pronounced changes in the deep and superficial reflexes and in the tone of the muscles. (3) The absence of paralysis or actual loss of strength. (4) The absence of changes in general or special sensibility. (5) The absence of visceral disorders. In brief, the symptoms of intrinsic cerebellar disease are confined exclusively to disturbances of the motor sphere and affect only the equilibratory and non-equilibratory synergic control of the muscles.

(98) Spinal Cord Tumours.

Charles A. Elsberg (*Amer. Journ. Med. Science*, February, 1920) found that spinal tumours most often occurred outside the cord. Of 67 he had operated upon, 49 were extra-medullary and 18 intra-medullary; in 42 of these the tumour was within the *dura mater*. They were found most often in the cervical and dorsal regions and between the roots of the *cauda equina*. The posterior aspect of the spinal cord was a site of election. Growths which formed between the dentate ligament and the posterior roots, specially caused severe root-pains and in a relatively early stage might induce the Brown-Séquard syndrome. Antero-lateral growths rarely began with root-pains. The amount of pressure exerted upon the spinal cord by a growth was not proportional to the size of the growth or its duration. Large tumours were usually softer than small; it was the small, hard tumours which caused most damage. From the appearance of the cord at the operation it was impossible to determine how great the actual damage had been and likewise the degree of recovery which might be expected. It was remarkable how little sensory disturbance might be caused by large tumours, filling the lower end of the spinal canal and enveloping each and all of the nerves of the *cauda equina*. In diagnosis, the most frequent difficulty was to distinguish between true spinal cord neoplasm and malignant vertebral disease. This especially applied to cases of malignant disease in which the spinal symptoms supervened gradually instead of suddenly, as is the rule. The diagnosis of intramedullary tumour was also difficult. In all, 105 patients were operated upon for certain, probable, or possible tumour. In 70 of these, the diagnosis of tumour was made or its existence considered probable and in 60 a tumour was found. In the remaining 35, tumour was considered possible but not probably; in only 7 was a tumour found. In the majority of cases the tumour was found at or near the suspected level. Concerning end results, many recovered completely; others retained disturbing symptoms, but improved; others showed little or no improvement. There was a fatality rate of 10%, but the writer thinks that with experience and a proper selection of cases the fatalities should not exceed 6%.

(99) A New Conception of Epilepsy.

P. Hartenberg (*Medical Press and Circular*, March 10, 1920), of Paris, argues that epilepsy is not in reality a convulsive disease; it is a phenomenon of inhibition, not of excitation; a psychic not a motor disorder; unconsciousness, not spasm, is its clinical characteristic; coma, not convulsions, is its essence. He attaches great importance to the preliminary arrest of psychic functions, the loss of consciousness, amnesia, loss of equilibrium, etc., which are indicative, not of imitation, but of inhibition of the cortical centres, and which invariably precede the phenomena of motor irritation. These introductory phenomena play the leading part in the pathogeny and clinical features of epilepsy. Epileptic disturbances may arise without any convulsive display, for instance, *petit mal*, and inhibitory episode, is often the first indication of the evolution of the disease. Conversely, convulsions may arise not only in epilepsy, but in almost any condition which arrests the activity of the higher cerebral centres, such as asphyxia, poisoning and anæmia. In such cases it would appear that the motor phenomena have their origin, not in the cerebral cortex, but in subcortical, bulbar and spinal centres. The prime necessity for the convulsive discharge is that the inhibition be brusque and deep; this is precisely to be found in epilepsy. Further, in epileptics, there is no indication of habitual cerebral stimulation nor of increased muscular tonus. Finally, the hypothesis of inhibition explains the preponderance of nocturnal paroxysms, sleep being in itself an arrest of cerebral activity. It also explains why a strong peripheral stimulus, such as a painful pinch, may annihilate the inhibition and so abort the paroxysm; it also explains why bromides are beneficial in major, but useless in minor epilepsy and why strychnine, the most powerful stimulant of motor cells, does not aggravate epilepsy.

British Medical Association News.

MEDICO-POLITICAL.

Meeting of the Federal Committee.

The Federal Committee of the British Medical Association in Australia met in the Main Building of the University of Queensland on August 24, 1920. The following representatives were present: New South Wales Branch, Dr. R. H. Todd, Dr. T. W. Lipscombe; Queensland Branch, Dr. W. N. Robertson, Dr. J. Lockhart Gibson; South Australian Branch, Dr. W. T. Hayward, C.M.G., Dr. H. S. Newland, D.S.O.; Tasmanian Branch, Dr. W. W. Giblin, C.B., D.S.O., Dr. E. Brettingham Moore; Victorian Branch, Mr. G. A. Syme, Dr. R. H. Fetherston; Western Australian Branch, Dr. W. P. Seed, Dr. F. H. Hadley. Dr. W. T. Hayward, C.M.G., took the chair.

In welcoming the new members to the Committee, Dr. Hayward pointed out with much gratification that for the first time since the inauguration of the Committee a full meeting had been secured.

Financial Statement.

Dr. R. H. Todd, in his capacity as Honorary Treasurer, presented the financial statement and balance sheet for the year ended June 30, 1920, duly audited by the Honorary Auditor, Dr. W. H. Crago.

Correspondence.

A letter was read from Dr. Earle C. M. Page, M.H.R., thanking the Committee for its congratulations on his election to Federal Parliament. The correspondence concerning the Address of Welcome which was presented by Mr. G. A. Syme on behalf of the Committee to His Royal Highness the Prince of Wales on his arrival in Australia, was read. The letter from Lieutenant-Colonel E. W. M. Grigg, Secretary to His Royal Highness, to Dr. W. T. Hayward, as Chairman, was also read (see *The Medical Journal of Australia*, July 3, 1920, page 21).

A letter was presented from the New South Wales Branch dealing with invitations which were being extended to members of the medical profession by the organizer of a publication, to be called "Who's Who in the Commonwealth," asking for biographical notes (see *The Medical Journal of Australia*, August 21, 1920, page 174, and August 28, 1920, page 201). In the course of a short discussion it was pointed out that the organizer resided in Adelaide and that many Adelaide practitioners had been approached. The canvassers had sought information concerning the professional and private careers of the doctors and had endeavoured to secure orders for a copy of the publication at the cost of £3 3s.. The opinion was expressed that the New South Wales Branch of the British Medical Association had been justified in applying the resolution of February 1, 1915, to the specific instance of "Who's Who in the Commonwealth." It was thought that the publication of a medical directory would be of considerable use. Medical practitioners, however, should not give information to publishers of these biographical undertakings.

Relationship of Overseas Branches and the Parent Association.

A letter from the Medical Secretary of the British Medical Association concerning the desirability of further powers being taken by the Association to enable it to become in part a federation of medical bodies, was read and considered. At the same time the Committee had before it the report of the Council of the Association and the report of the Annual Representative Meeting, Cambridge, 1920 (see *British Medical Journal* Supplement, April 24, 1920, page 108-111, and July 3, 1920, page 728). From the information before the Committee it was impossible to ascertain the views of the Council or of the Representative Body in regard to the definition of the class of organizations to be admitted to membership of the Association. It appeared, however, that since the Representative Body had adopted the proposals of the Council without amendment and after very little discussion, the exact nature of the proposed alterations of the articles and by-laws would not be determined until after the conference of representatives of the overseas Branches with representatives of the Association at home.

Dr. W. N. Robertson recognized that the future of the Association in Australia would depend largely on the manner in which the views of the Federal Committee were presented at the Conference. He thought that the Committee should not be satisfied with representation by any chance member who happened to be in England at the time. It was therefore desirable that the Committee should select someone to represent them who was well versed in the legal and constitutional difficulties involved in the question. He thought it would be quite reasonable to ask the Branches to provide ample funds to secure the services of a competent representative.

Dr. W. T. Hayward pointed out that when Dr. Newland and he were in England the Council held the opinion that it would be difficult or impossible to accede to the requests of the Australian Branches. It appeared that some pressure had been brought to bear on the Council, since the proposals now put forward appeared to satisfy the requirements of the Australian Branches. He thoroughly agreed with Dr. Robertson that it was highly important to have an able representative at the Conference. The Branches had much to gain in the negotiations and consequently they would be prepared, he felt sure, to find the necessary money. No one should be asked to make a financial sacrifice to serve the Branches in Australia. They all knew that travelling expenses had increased very considerably.

After further discussion the members arrived at the conclusion that a contribution of 7s. 6d. per member throughout the Commonwealth would suffice for the expenses of a delegate.

It was moved by Dr. W. N. Robertson, seconded by Dr. H. S. Newland and resolved:—

(*i.*) That the matter stand over pending the receipt of a further communication from the British Medical Association Council.

(*ii.*) That the Committee is of opinion that a representative of the Branches of the British Medical Association in Australia should be sent to England to act at the Conference of Representatives of the Overseas Branches with the Council, arranged at the Annual Representative Meeting, 1920, to be held in connexion with the proposed alteration of articles and by-laws.

(*iii.*) That in the event of the Branches agreeing to the resolutions, they be requested to provide the necessary funds to meet the expenses of the representative (estimated at 7s. 6d. per member).

Travelling Expenses of Members of the Federal Committee.

The Honorary Secretary reported that the Victorian Branch, the Queensland Branch, the South Australian Branch, the Western Australian Branch and the New South Wales Branch had considered and approved the proposed amendment of the constitution of the Federal Committee to provide for the payment of travelling and other personal expenses of members attending the meetings of the Committee.

It was therefore resolved that Clause 5 be amended to read as follows:—

5. To meet the general expenses of the Committee, including the travelling and other personal expenses of its members, the Treasurer of each Branch shall, in accordance with the by-laws of the Branch, pay on the demand of the officer of the Committee duly appointed by it to receive the same, such sum or sums as the Committee may require, provided that the total so payable in any year, shall not exceed a sum equal to 2s. per member of the Branch.

In accordance with procedure, it was determined to send to the Council of the British Medical Association a notice of this amendment and to request the Council's approval of it. It was also resolved that the Branches in Australia be asked to amend their by-law No. 5, to bring it into line with the rule of the Federal Committee.

Repatriation Assistance to Returned Medical Men.

The Honorary Secretary read the correspondence with the Department of Repatriation and gave a short account of the views of the Society of Returned Medical Officers of New South Wales in regard to the assistance extended by the Department of Repatriation to returned medical officers. The policy of the Department based on the interpretation by the Commissioners of the regulations under

the *Australian Soldiers' Repatriation Act, 1920*, had been embodied in a letter dated April 22, 1920, from the Comptroller to the Society of Returned Medical Officers of New South Wales. This letter had been published in *The Medical Journal of Australia* (July 31, 1920, page 11-23).

Mr. G. A. Syme referred to the difficulties which he and the other representatives of the Victorian Branch had experienced during their interview. He pointed out that the new Commission appeared to have greater powers than the previous Commission, but he feared that the Minister was not in accord with the views taken by the members of the medical profession and of the Returned Sailors' and Soldiers' League.

In the course of further discussion the Honorary Secretary read the regulations governing the questions at issue. They are as follows:—

Tools of Trade and Equipment.

108. A Deputy Commissioner or the Executive of a Country Local Committee may, subject to the provisions of Regulation 111, grant to the soldier or the widow of a soldier an order for the supply, by way of gift, of such tools of trade, professional instruments or other articles of personal equipment, to the value not exceeding the sum of £10, as the Deputy Commissioner or the executive deems necessary for the purpose of the calling of the soldier or the widow:

Provided that no such order shall be granted to a settler under a Soldier's Land Settlement Scheme of a State:

Provided further that where an applicant under this regulation applies for the supply of tools of trade or other articles exceeding in value the sum of £10, the Board shall deal with the application and may grant an order under this regulation in addition to granting an order under the next succeeding regulation.

Supply of Tools of Trade, etc., Under Hire Purchase Agreement.

109. A Board may grant to a soldier, or the widow of a soldier, an order for the supply, under a Hire Purchase Agreement in accordance with Form D in the Schedule, of tools of trade, professional instruments or other articles or personal equipment, exclusive of clothing and uniform, to a value not exceeding the sum of £50, to enable him or her to engage in remunerative occupations:

Provided that where an applicant under this regulation has been granted benefits under the last preceding regulation any loan granted shall not exceed the sum of £50 inclusive of the value of the gift granted under the last preceding regulation.

Small Businesses, etc..

112. A Board may make an advance by way of loan for the purchase of a business, plant, stock or livestock, not exceeding the sum of £150 in each case, to—

(*a*) the widow with one or more children of a soldier who died prior to discharge;

(*b*) a married soldier incapacitated to the extent of being unable to engage in his usual occupation, and who is unsuitable for vocational training for an occupation in substitution of his usual occupation; or

(*c*) a soldier who, immediately prior to enlistment, was dependent for his living upon a business owned and conducted by him, and disposed of the business in order to enlist, and who satisfies the Board that he possesses the experience and ability to conduct with a reasonable prospect of success the business applied for:

Provided that the Board may in a special case, with the concurrence of the Deputy Commissioner advance an amount not exceeding £250, and where in connexion with any such case, any difference of opinion arises between the Board and the Deputy Commissioner, the case shall be forwarded to the Commission for final decision:

Provided further that an advance for the purchase of livestock will only be made where the applicant is not eligible to secure such assistance under the Land Settlement Scheme of the State in which he resides:

Provided also that no assistance shall be granted under this regulation to a soldier included in paragraph (*c*) of this regulation, where the application is made after the expiration of twelve months after the date of his discharge.

The Honorary Secretary thought that it was evident that Regulations 108 and 109 had application to medical men and that there was nothing in them to justify the limitation of the application to medical men who had not been in practice before enlistment. On the other hand, he pointed out that Regulation 112 could be held to have no application to medical men. The marginal note referred to small businesses and the word "profession" or "professional" had been avoided. He therefore moved and Dr. T. W. Lipscomb seconded:—

> That a request be made to the Commissioners that Regulations 108 (tools of trade and equipment) and 109 (supply of tools of trade, etc., under Hire Purchase Agreement) of Part IX ("furniture, equipment and businesses") be interpreted as extending to medical practitioners who had been in practice before going to the war, as well as to those who had not been in practice.

The motion was carried.

In moving the next motion, Dr. Todd thought that it would be advisable to request the Commissioners to amend the regulations so that in suitable cases claims by medical men for assistance in re-establishing themselves in practice, could be dealt with. Dr. T. W. Lipscomb seconded the motion, which was carried in the following terms:—

> That the Commissioners be asked to extend the provisions of Regulation 112 (business, plant, etc.) so as to enable a State Board to advance by way of loan a sum not exceeding £150, or in special cases £250, to a medical practitioner.

Medical Treatment of Discharged Soldiers.

Mr. G. A. Syme reported that the Repatriation Department had done nothing in regard to the adoption of the scale of fees recommended for medical services required for discharged soldiers. The Minister had apparently taken up the position that unless the British Medical Association flatly refused to allow its members to perform these services at rates below those suggested, he would not modify circular "L." He deplored this action on the part of the Minister. The Federal Committee had justified its claim for more adequate remuneration and the Minister should not have thrown out a challenge of this kind. He therefore moved, with the support of Dr. R. H. Fetherston:—

> That the Federal Committee again urge that the Repatriation Department take into consideration the rates and conditions of appointment for the Department's local medical officers and carry out the recommendations approved by the Federal Committee at its meeting on February 5, 1920.

Deportation of Medical Practitioners of Enemy Origin.

The Honorary Secretary reported that no official information had been received concerning the deportation of medical practitioners of enemy origin. From the daily press they had learned that Dr. Eugen Hirschfeld was about to be deported after considerable delay. In regard to Dr. Max Herz, the New South Wales Branch and Society of Returned Medical Officers of New South Wales had sent a large deputation to the Prime Minister. The representatives had pointed out to the Prime Minister that Dr. Max Herz's special skill as an orthopædic surgeon was not of a nature to justify the reversal of the deportation order. Mr. Hughes had intimated that his case would be dealt with in the usual manner.

Mr. G. A. Syme stated that he had been informed by the Department that several persons had been interned during the war on suspicion. Their cases had later been investigated and the authorities had relied on the results of these investigations in regard to the action to be taken. On the motion of Dr. R. H. Todd, seconded by Dr. W. W. Gibiin, it was resolved:—

> That a further letter be sent to the Premier's Department, urging that the deportation which is understood has been decided upon, of Dr. Eugen Hirschfeld and Dr. Max Herz be proceeded with without delay.

Medical Officers' Relief Fund.

The Honorary Secretary reported officially that the deed of trust of the Fund had been executed.

A financial statement of the Trustees and a short report dealing with the application and the claims were presented. Information concerning the utility of the Fund was given. The total amount contributed, including amounts promised, aggregated £12,203 16s. 10d. on June 30, 1916.

Prohibition of Importation of Bacteriological Products and Sera.

The Honorary Secretary reported that no progress had been made in regard to the endeavour to influence the Department of Trade and Customs to admit into Australia bacteriological products and sera needed for the treatment of persons suffering from infective processes, free of duty. In view of the fact that the question of the new tariff would be dealt with by Federal Parliament during the course of a short time, no further action was taken.

Importation of Medical and Surgical Instruments.

The Honorary Secretary reported that the New South Wales Branch, the Victorian Branch and the South Australian Branch had considered the question of action being taken to influence the Department of Trade and Customs or, as an alternative, the members of Federal Parliament, to remove the duty imposed on medical and surgical instruments used in public charitable hospitals. At the request of these Branches the Chairman, Dr. W. T. Hayward, had forwarded their views to the Minister. The Committee passed a resolution approving of the action of the Chairman.

Extension of Public Health Services.

Curative Medicine.

At the request of the Victorian Branch, the Committee considered a proposal for the collection of information concerning the clinical facilities existing in the several States. It was decided that for the present no action should be taken.

Preventive Medicine.

The Honorary Secretary reported that the findings of the Federal Committee, as set out in *The Medical Journal of Australia* of November 8, 1919, page 409, and February 14, 1920, page 156-157, had been submitted to the Prime Minister and to the Director of Quarantine.

Australasian Medical Congress.

A letter was read from the Executive Committee of the Australasian Medical Congress, Brisbane, informing the Federal Committee that it was proposed to hold a ballot of the members of the Eleventh Session on the question of the abolition of the Australasian Medical Congress, in order that the Australasian Branches of the British Medical Association might be given an opportunity to establish congresses. Further correspondence was read from the Committee to the Executive Committee of the Congress and to the New Zealand Branch. From this corrcspondence the intention of the Federal Committee was clear. The resolution adopted on February 5, 1920, was:—

> That steps be taken to organize British Medical Association medical congresses to come into operation upon the winding up of the Australasian Medical Congress, such congresses to be undertaken by the Federal Committee on behalf of the Branches in Australia collectively, the New Zealand Branch being invited to cooperate.

This resolution was taken to mean that in the event of the Federal Committee being in a position to organize British Medical Association congresses, the Australasian character of these congresses would be preserved. The correspondence was received.

Votes of Thanks.

The Committee recorded a vote of thanks to the Executive Committee of the Australasian Medical Congress, Brisbane, 1920, for their kindness in providing accommodation for the Federal Committee in the University of Queensland.

A vote of thanks was also passed to Dr. W. T. Hayward for presiding at the meeting.

Next Meeting of the Federal Committee.

It was determined that the next meeting of the Federal Committee should be held in the month of February, 1921, in Melbourne, and that the exact date should be fixed by the Chairman.

The undermentioned has been nominated for election as a member of the New South Wales Branch:—

Patrick Cockburn, Esq., M.B., B.S. (Univ. Adel.), 1914, New Lambton.

THE HEALTH OF SCHOOL CHILDREN IN SOUTH AUSTRALIA.

In the report of the Minister of Education of South Australia for the year 1919, Dr. Gertrude Halley, the Medical Inspector, publishes a short summary of the work conducted by her during the year. The total number of children examined was 2,591. She points out that this number is small in comparison with other years, owing to the outbreak of influenza. Much time was taken up in the endeavour to prevent the spread of the disease in the schools. In addition, Dr. Halley spent time and energy in inoculating with vaccines many members of the staff of the Department, many officers of other Government departments and many teachers.

Of the 2,591 children, 75 were found to have visual defects sufficient to interfere with educational progress. Less severe defects were found in 152 other children. Defects of hearing were found in 28 children and were severe in 15. Enlarged tonsils, adenoid vegetations and other nasal or faucial affections were detected in 1,044 children. This represents 40.29% of the children examined. In 318 children the nose and throat defects interfered with educational progress. Dental defects were still more common. They interfered with the general health of the children in 464 instances, while in 1,449 instances they were less serious. The dental defects appeared in 73.83% of the children examined. Spinal curvature was detected in 236 children. The frequency of these conditions appears to vary considerably in the different schools. The general cleanliness of the children is indicated by the number of defects of hair and skin. Of the former, there were 89 and of the latter 50. These figures should be regarded as satisfactory.

In commenting on the defects discovered, Dr. Halley again calls attention to the harm done by children wearing incorrect glasses prescribed by opticians and not by oculists. She also urges upon the Government the necessity for the institution of dental clinics.

In dealing with infective diseases she records an epidemic of morbilli of considerable extent. No less than 2,360 infections were reported in the various parts of the State. The number of cases of diphtheria was smaller than in 1918. There were, however, three mild epidemics and several sporadic cases, totalling 434 in all. At each school at which an infection occurred, swabs were taken of teachers and all children who had been absent from school during the previous month. The three schools were closed, but Dr. Halley points out that the closure had no effect on the spread of the disease. We would suggest that it would rather tend to spread the disease.

During the influenza epidemic no less than 176 schools were closed on the recommendation of the Chairman of the Central Board of Health. In the metropolitan schools lists were forwarded daily of all children absent from school on account of "severe colds" or sore throats. The teachers were required to inspect the children on arrival each day and to send home any child suffering from a cold. Dr. Halley considers that this practice tended to check the infection.

Routine disinfection of rooms or of whole schools was carried out in every case of infectious disease notified to the Department. In small country schools the disinfection took the form of a thorough cleaning under the supervision of the teacher.

Dr. Halley expresses the hope that a conference may soon be held in connexion with the question of the proper treatment of mentally defective children. She urges that something definite should be done and that there should be uniformity of action throughout the Commonwealth.

She deals briefly with the necessity of proper equipment of playgrounds and standardization of apparatus. Excellent results were obtained at the Glover Playground.

In addition to the usual lectures on hygiene delivered at the University Training College and at the Observation

School, Dr. Halley arranged a series of practical lectures to women on nursing. These lectures, she thinks, were of value during the influenza epidemic.

Investigations have been carried out with the view to determine the comparative value of the Montessori and other methods of assessing the intellectual standard of children. Up to the present the results are strongly in favour of the Montessori methods.

In the concluding paragraph Dr. Halley pleads for assistance. There are over 75,000 children attending school in South Australia. It is obviously impossible for one medical inspector to cope with the work.

Correspondence.

WARMING ANÆSTHETIC VAPOURS.

Sir: In *The Medical Journal of Australia*, August 7, 1920, in a review of "Backwaters of Lethe," the following sentences occur: "In discussing modern methods reference is made to Shipway's apparatus and it is rightly pointed out the value of warming by a U tube in a thermos flask is negligible unless the vapour is also moistened by being passed over the surface of hot water. The question of the value of warming the vapour is well discussed and the opinion is expressed that in view of the low specific heat as gases and vapours, warming is hardly necessary."

Firstly in regard to moistening the vapours. I have yet to discover the physiological advantage of delivering to a patient a vapour of a gas saturated with water vapour. I have always understood air heavily charged with moisture to be decidedly injurious and the passage of vapour through a chamber containing hot water would entail this. Also in the event of a chloroform and ether mixture, it would serve as a reservoir for the more soluble of the two anæsthetics and so interfere with any alteration of the mixture by the administrator.

Secondly, as regards the next sentence. The idea of the Shipway apparatus is to deliver to a shocked patient an anæsthetic without lowering his temperature. An anæsthetic need not be warmed—so much as not cold. Air bubbled through ether makes a freezing mixture, which must lower the patient's temperature if inhaled. And the longer it is inhaled the greater number of ill-spared calories are used up. To obtain a level anæsthesia not only must the ether be kept at a level temperature, but also the vapourized product. Air should be delivered to the patient preferably at about his body temperature and to warm a table and theatre and pump freezing gas into the lungs is too Gilbertian a procedure for modern medicine.

I have bludgeoned patients into unconsciousness by somnoform and ethyl chloride.

I have slowly suffocated them by closed ether through various sized bores.

I have frozen them by open ether till I had to thaw them out by hot towels.

I have kept them suspended between heaven and earth like modern Mahomets by means of chloroform. And at times their faltering breaths almost dimmed the gates of pearl.

I have given alkaloids before, particularly morphia and scopolamine and sweated blood at the absence of reflexes.

But judiciously administered warm chloroform and ether, in my experience, stands alone both for the patient and the surgeon. The only reason I can advance for its lack of popularity is the slightly slower induction, the more bulky apparatus and the fact that it does not bear the imprint of American approval.

Yours, etc.,

M. KASNER MOSS.

Perth,
(Undated).

ANÆSTHETICS ADMINISTERED BY DENTISTS.

Sir: I have followed with a great deal of interest the discussion raised by "Stertor" with reference to the administration of anæsthetics by dentists.

I think "Stertor" must have overlooked the fact that a dentist was the first anæsthetist.

The fact is that anæsthesia is just as essential to the practice of dentistry as it is to the practice of surgery and, while a very small percentage undergo in any one year any surgical operation requiring anæsthesia, a comparatively larger percentage require to undergo dental operations for which anæsthesia is either necessary or highly desirable.

It necessarily follows that the administration of anæsthetics is just as essential a part of the proper training of a dentist as of a physician and, indeed, much more essential. This is recognized in all the principal dental colleges in the world.

It is so in America.

It is markedly so in Edinburgh, where I attended a post-graduate course and found the subject most exhaustively and thoroughly taught.

It is so in Melbourne.

In Sydney I hope that more attention will be paid to this absolutely essential part of a dentist's training than has so far been the case.

A physician may manage for long periods with little or no knowledge of anæsthetics. The use of them in a greater or less degree is part of a dentist's almost daily work. To those who know a dentist's work it seems little short of ridiculous to suggest that they should not administer anæsthetics. All properly trained dentists have been taught the use of anæsthetics and many dentists have more experience in the administration of those anæsthetics which are suitable to dental practice, such as nitrous oxide, ethyl chloride and somnoform, than the majority of medical practitioners, more knowledge in fact than all, except the very small body of specialists in anæsthesia. There are, of course, dentists, just as there are many doctors, without much special experience in anæsthesia. The dental profession taken as a whole is just as honourable a profession as the medical profession and you do not find dentists any more than doctors, meddling with anæsthetics without training or experience.

Then, again, dentists do not commonly use such anæsthetics as chloroform or ether, which do not enter into their common practice, but if these are necessary prefer to call in the specialist in anæsthetics.

That is my practice and I am sure that I am only acting in accordance with the best practice of the profession.

The discussion has focussed itself on a special anæsthetic, ethyl chloride. It so happens that this particular anæsthetic has in the past been used much more in dental practice than in surgical practice. It necessarily follows that dentists who use anæsthetics, are likely to have a greater practical knowledge of ethyl chloride than the ordinary medical practitioner. Ethyl chloride is so well recognized as an efficient and suitable anæsthetic for dental practice that in Edinburgh in 1905 and again in 1913 I found Dr. Gibbs giving special training in the use of ethyl chloride, both alone and in sequence.

In my personal practice I have consistently followed Dr. Gibbs's method of using ethyl chloride in sequence with nitrous oxide. In London also and elsewhere I have found ethyl chloride in use in the best dental hospitals.

There are two methods of using ethyl chloride. The first is the enclosed measured method, which was taught in Edinburgh, and the second is the unmeasured method, which I fear is still used by some doctors.

The first method is absolutely safe, inasmuch as the inhalation of not more than 2 c.cm. is quite sufficient for complete anæsthesia and is absolutely harmless and safe. The second method is dangerous with this anæsthetic, because you cannot tell how much the patient is getting and may therefore, without appreciating it, administer a fatal quantity.

It is a most significant fact that no death has ever occurred in New South Wales in the use by dentists of ethyl chloride. I am not sure that "Stertor" can claim the same record for the medical profession. I have not been able to discover any record of any death anywhere in the world due to the use of ethyl chloride by the measured enclosed method.

When I was in New Zealand I was on the staff of a large general hospital as honorary dental surgeon and I found that the medical staff were alarmed by my use of ethyl chloride. On investigation I found that their alarm was

based on the knowledge of the death of a boy under ethyl chloride while undergoing an operation for tonsils and adenoids. I found on inquiring that by the unmeasured method 8 c.cm. had left the bottle and the boy had inhaled an unknown part of these 8 c.cm..

I need hardly say that 8 c.cm. is a quantity sufficient to completely anæsthetize four adults, if used by the enclosed measured method.

When my medical friends appreciated the details of the measured method they ceased to feel any alarm.

The moral of all this is threefold:—

(1) That all dentists ought to be properly trained in the use of anæsthetics suitable to their practice.
(2) That ethyl chloride properly administered by the measured method is perfectly safe.
(3) That "Stertor's" impression that ethyl chloride is dangerous rather indicates a want of acquaintance with the safe method of its use.

Yours, etc.,

W. STEWART ZIELE.

185 Macquarie Street, Sydney,
(Undated).

Medical Appointments.

Dr. H. Mander North (B.M.A.) has been appointed for a period of twelve months Junior Resident Medical Officer to the Department of Mental Hospitals, New South Wales.

The appointment of Dr. J. J. Hollywood (B.M.A.) as Visiting Surgeon and Dispenser at Maitland Gaol is announced in the *New South Wales Government Gazette*.

Dr. E. R. A. Macdonnell (B.M.A.) has been appointed Medical Superintendent of the Mental Diseases Hospital at New Norfolk, Tasmania.

The appointment is announced of Dr. H. S. Lucraft as Officer of Health to the Norseman District Road Board of Western Australia.

For the purposes of the *Workers' Compensation Acts, 1916 to 1918*, Dr. H. S. McLelland (B.M.A.) has been appointed a Medical Referee for the whole of the State of Queensland.

Medical Appointments Vacant, etc.

For announcements of medical appointments vacant, assistants, locum tenentes sought, etc., see "Advertiser," page xxiii.

Alfred Hospital, Prahran, Victoria: Honorary Pathologist.

Department of the Navy: Three Medical Officers.

Government of Tonga: Two Medical Officers.

Medical Appointments.

IMPORTANT NOTICE.

Medical practitioners are requested not to apply for any appointment referred to in the following table, without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, 429 Strand, London, W.C.

Branch.	APPOINTMENTS.
NEW SOUTH WALES. (Hon. Sec., 30.-34 Elizabeth Street, Sydney.)	Australian Natives' Association. Balmain United Friendly Societies' Dispensary. Friendly Society Lodges at Casino. Leichhardt and Petersham Dispensary. Manchester Unity Oddfellows' Medical Institute, Elizabeth Street, Sydney. Marrickville United Friendly Societies' Dispensary. North Sydney United Friendly Societies. People's Prudential Benefit Society. Phœnix Mutual Provident Society.
VICTORIA. (Hon. Sec., Medical Society Hall, East Melbourne.)	All Institutes or Medical Dispensaries. Manchester Unity Independent Order of Oddfellows. Ancient Order of Foresters. Hibernian Australian Catholic Benefit Society. Grand United Order of Free Gardeners. Sons of Temperance. Order of St. Andrew. Australian Prudential Association Proprietary, Limited. Mutual National Provident Club. National Provident Association.
QUEENSLAND. (Hon. Sec., B.M.A. Building, Adelaide Street, Brisbane.)	Australian Natives' Association. Brisbane United Friendly Society Institute. Cloncurry Hospital. Stannary Hills Hospital.
SOUTH AUSTRALIA. (Hon. Sec., 3 North Terrace, Adelaide.)	Contract Practice Appointments at Renmark. Contract Practice Appointments in South Australia.
WESTERN AUSTRALIA. (Hon. Sec., 6 Bank of New South Wales Chambers, St. George's Terrace, Perth.	All Contract Practice Appointments in Western Australia.
NEW ZEALAND: WELLINGTON DIVISION. (Hon. Sec., Wellington.)	Friendly Society Lodges, Wellington, New Zealand.

Diary for the Month.

Sept. 13.—Tas. Branch, B.M.A..
Sept. 14.—N.S.W. Branch, B.M.A., Ethics Committee.
Sept. 15.—W. Aust. Branch, B.M.A..
Sept. 15.—Central Southern Med. Assoc. (N.S.W.).
Sept. 16.—Vic. Branch, B.M.A., Council.
Sept. 21.—N.S.W. Branch, B.M.A., Executive and Finance Committee.
Sept. 24.—N.S.W. Branch, B.M.A.; Election of two members to Federal Committee.
Sept. 28.—N.S.W. Branch, B.M.A., Medical Politics Committee; Organization and Science Committee.
Sept. 29.—Vict. Branch, B.M.A., Council.
Sept. 30.—S. Aust. Branch, B.M.A..
Sept. 30.—Vict. Branch, B.M.A., Election of two members to Federal Committee.
Oct. 1.—N.S.W. Branch, B.M.A., Annual Meeting of Delegates of Local Associations with the Council (first day).
Oct. 1.—Q. Branch, B.M.A..

EDITORIAL NOTICES.

Manuscripts forwarded to the office of this journal cannot under any circumstances be returned.

Original articles forwarded for publication are understood to be offered to *The Medical Journal of Australia* alone, unless the contrary be stated.

All communications should be addressed to "The Editor," *The Medical Journal of Australia*, B.M.A. Building, 30-34 Elizabeth Street, Sydney. (Telephone: City 2646.)